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GENUINE

Trussell

74 CL

Uma inornata

Uma inornata

Mayhew 1958

Uma inornata

Aug. 26 1000 Palms, Riverside Co., Calif.

This morning, beginning at 0710, we caught several juvenals along Ramon Road from 1000 Palms to a point 3 miles west toward Palm Springs. At a point 3 miles west of 1000 Palms we left the highway and entered a partly completed subdivision that has black-topped roads. In this area, from 0755 to 0900, seven adults were captured. The temps. at this time ranged to:

air temp. — 40.2°C.

road surface — 52°C.

soil surface — 55°C.

Sept. 19 3 mi. W. of 1000 Palms, Riverside Co., Calif.

Although we searched the area from 0630 on, no animals were seen until 0750, when one adult was spotted. At this time the air temp. was 31.2°C., and the soil surface temp. was 36.6°C. A wind of 3 miles per hour was blowing from the northwest. The relative humidity was less than 5%. By 0915, however, we had captured 11 adults, which we felt was an adequate sample for this location for this time (8 ♀, and 3 ♂). At the time we stopped looking for Uma, the air temp. 37.6°C., and the soil temp. was 55°C. We were not able to explain why so

Uma inornata

Sept. 19 — 3 mi. W. of 1000 Palms, Riverside Co., Calif.

many females were seen and so few males at this time. Usually in the past we have seen them in about equal numbers.

Oct. 24 — 4 mi. W. of 1000 Palms, Riverside Co., Calif.

We reached the collecting site at 0745, but at 0755 it began to rain. However, the rain stopped at 0800 after a fairly hard shower. The sandy surface of the area was damp 1 cm. below the surface. The temp. of the air just after the shower was 20.7°C., the soil surface temp. was 21°C. Two juvenals were seen & captured at 0825. At 0840 an adult was seen sitting in the sun at the base of a Larrea bush. Three other adults were caught a little later (0855 to 0925). Two of these were seen on the surface and one was stired out of the sand at the base of some vegetation.

5 mi. N.W. 1000 Palms, Riverside Co., Calif.

We decided to check "Granddaddy Dune" for animals. We reached this area at 1010. We captured the remainder of our October sample (nine animals) at this location between 1030 and 1138. Some were seen on the surface, but most of them were dislodged from the sand at the base of vegetation.

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Oct. 24 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.
Most of them were found in the sand at the base of an annual plant on the lower edge of the dune on the lee side. When a lizard was dislodged from its hiding place, it nearly always headed for the nearest creosote bush, which never was very far away. The air temp. during this period ranged from 23.3°C. to 24.2°C., that of soil surface ranged from 32°C. to 32.6°C.

Nov. 15 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.
Only two lizards were seen here today — both juvenals. They were on the surface of the sand on the lee side of their respective dunes. The first was seen at 1100, the second at 1140. The wind was blowing from the west at 10-15 mph., with gusts up to 19 mph. The air temp. at this time was 14°C., the soil surface temp. was 21.4°C.

Dec. 20 We searched from 1035 to 1330, with a short break for chow, without seeing any sign of a lizard. The air temp. ranged from 18°C. to 21°C., the soil surface temp. from 26°C. to 36°C. during this period.

1959

Jan. 23 Rancho Mirage, Riverside Co., Calif.
Today Lloyd Tevis gave me an adult ♂ he captured 3 days ago,

Mayhew 1959

Uma inornata

Jan. 23 Rancho Mirage, Riverside Co., Calif. January 20, while digging in the sand on one of his projects. The animal was 3 inches beneath the surface at the time of its capture.

Jan. 25 5 mi. N.W. of 1000 Palms, Riverside Co., Calif. The first animal seen today was at 1330 (immature). At this time the air temp. was 24°C., soil surface temp. 30.5°C., wind 8-10 mph. from S.E., relative humidity was 24%. We left the area at 1400 after seeing only one other immature, which we captured. Almost no tracks are seen on the dunes now, indicating little or no activity yet. The remains of a pair of adults were found in an old tire that had filled with sand. The ♂ was 108 mm. (S-V length), the ♀ was 84 mm. They were mummified, and indications were that they had starved to death inside the tire. Apparently they had been unable to find their way out of the tire once they had entered it.

Feb. 20 This afternoon at 1530 we began looking for specimens. A wind had blown through the area fairly recently evidently, because there were almost no tracks visible on

Mayhew 1959

Uma inornata

Feb. 20

5 mi. N.W. of 1000 Palms, Riverside Co., Calif.

the sand. However, several Uma tracks were present. We followed one large set of tracks to the top of the lee side of one dune built up behind a Larrea divaricata. We dug out one of the largest specimens I have ever seen. No matter how many other tracks we followed and dug into, however, only one other animal was turned up in this manner (and it escaped). One could see where a Uma had come out of the sand, moved out onto the flat area & backed then returned to the dune. Nevertheless, we simply could not find any animals when we dug into the dunes. One young one was found in the sand in an old tire, but it was released. Its tail had been injured, but not broken off. Another tip had grown at right angles to the injured tip at the point of injury. Thus, it possessed two tips to its tail. Based on the number of tracks seen this time, Uma has become much more active since our last trip here on Jan. 25. The tracks this time were seen on the flat area east of Granddaddy Dune, not on the slope of the dune where we've been working (no tracks were seen on this big dune).

Mayhew
1959

Mar. 6 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.

This morning Frank Aubrey + I made our monthly collection of this species. We began looking for animals at this site at 1005. We captured 8 animals of this species, the first of which was caught at 1030. They are far more active than when we were here in February. Many more tracks are visible, and more adults are seen. We stopped looking for animals at 1225, even though the animals were still active (we had some other jobs to do before the day was over).

Apr. 29 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.

We arrived at collecting site III at 0900, and after obtaining our soil samples, began looking for animals at 0930. However, it was soon obvious that we were a little late. However, we were able to catch 9 animals before they completely disappeared underground (5 adult ♂♂, 3 adult ♀, 1 immature ♀). After 1120, when air temps. were (30") 38.6°C., (1 cm) 41.0°C. and soil surface temp. was 56.0°C., all animals captured were kicked out of the sand with our snake hooks. They buried themselves (at least the ones we uncovered) near the base of creosote

Apr. 29 — 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.

bushes on the shady side of the dune.

Apr. 30 — Frank Aubrey + I returned today to complete our April sample. The wind was blowing 25-30 mph., so fairly large piles of sand were moving through the air. Consequently, few animals of any kind were to be seen. However, we were able to catch 9 animals — 3 ad. ♂, 3 ad. ♀, 2 immature ♂, & 1 immature ♀. Most of these had to be chased out of the sand, even though the temps. were not too low. Most of them were driven out of sand on the S.E. side of a creosote bush dune, often close to some creosote bush branches (wind was coming from N.W.). One young animal was seen sitting on top of the stringer of sand extending on the lee side of a creosote bush. Most of the animals that we spooked ran over the top of the dune, and usually buried in the sand again. Some, however, stayed above ground until captured, after we had uncovered them.

May 24 — 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.

The wind was blowing so hard that only 3 animals were seen this morning. One of these was caught. All of them were on the surface when we saw them.

May 24 — 5 mi. W. of 1000 Palms, Riverside Co., Calif. We were unable to uncover any by digging through the sand at the bases of the bushes.

May 29 — Frank Aubrey & I returned to this station this morning. The wind was still blowing between 13 & 23 mph., with gusts to 29 mph. By 0850, however, some of the animals began to be visible on the surface, but most of them were very "spooky". Not only were some seen on the surface, but a number of animals (most of them adults) were disturbed from the surface layers of the sand on the sunny slopes of the hummocks produced by sand piling up around the bases of *Larrea divaricata*. We found it was much easier to catch animals disturbed from the sand on small hummocks than those exposed on large hummocks. Some of these animals were still active when we left the area at 1145.

June 12 — 5 mi. N.W. of 1000 Palms, Riverside Co., Calif. We tried to collect animals on the flat area S.E. of "Granddaddy Dune", but to little avail. We were afraid we might be depleting the population at our regular collecting site. However, we found animals were still abundant there, but not on the flatter area to the S.E.

July 20 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.

Relatively few small animals were seen this month. Perhaps the bulk of last year's crop (those that survived) are now adult size. It is conceivable that the small animals seen now were hatched at the end of last season — the early hatch could now be considered adult size. This same situation was noted in Uma notata this month, but did not appear to be so true with Uma scoparia. We spent considerable time looking for animals in the creosote covered dunes N.W. of our soil sampling site, but without too much success. The bushes look awfully dried out in this area. It appears that, in spite of our repeated capturing activity in the larger & bushier creosote dunes near our soil sampling station, this area still produces our greatest catches.

1961

Jan. 16 UCR campus, Riverside Co., Calif.

at 12:30 there were five animals above ground (see U. notata & U. scoparia notes). all but one seemed to be quite fat & healthy. The largest one above ground appeared to be the thinnest of all. However, it didn't appear to be suffering to any extent.

Mayhew
1961

Uma inornata

Feb. 5

Palm Springs area, Riverside Co., Calif.

Ligard No.	Sex	Weight (gms)	S-V length (mm.)
10	♀	1.9(gms)	40 mm
11	♂	1.6 gms	37 mm
12	♀	1.3 gms	35 mm
13	♀	3.3 gms	45 mm
14	♀	3.9 gms	48 mm
15	♀	3.0 gms	45 mm
16	♀	3.1 gms	45 mm
17	♂	3.3 gms	43 mm
18	♂	2.6 gms	41 mm
19	♂	2.4 gms	40 mm
20	♀	2.9 gms	45 mm

May 27

UCR, Riverside Co., Calif.

a young ♀, No. 6, in the indoor cages laid one egg on top of the sand. It was entirely dessicated by the time it was found. It measured 24.6 × 10.0 mm. She is now 68 mm. long (S-V length), but was only 51 mm. long when she was brought into the lab. on Oct. 7, 1960.

May 29

This afternoon No. 6 was seen digging in the sand near the water dish. I moistened the sand in that area. Then she went back to digging. She was completely out of sight in the hole when I left at 1700. When I returned at 2030, the hole was filled with sand. I carefully dug down until I found one egg (21.5 × 13.2 mm). It was 5" from where the opening had been. The sand was 2" deep

May 29

UCR campus, Riverside Co., Calif.

at that spot, and the egg was just about on the floor of the cage. The egg was soft yet (no turgidity). Walt Moberly placed it in moist sand in the map room to see if it is fertile (formalin fumes kill all the eggs in my lab.). The sand was quite moist where she deposited the egg. She did much of the digging with her hind feet — at least, she disposed of most of the excavated dirt by kicking it away from the hole entrance with her hind feet. She was seen digging somewhat over an hour before 1700.

June 19

Palm Springs area, Riverside Co., Calif.

These animals appeared to be rather scarce today. Very few tracks were seen, either. I don't know whether this extremely dry year has anything to do with it or not. One DOR ad ♂ (110 mm. S-V length) had had its gonads squeezed out of the body along with the guts. However, the vasa deferens were highly convoluted & there were sperm at the terminal ends. The animal had some orange on its sides.

June 23

UCR, Riverside Co., Calif.

A ♀ was given to Lorei Ostroff today to put in 24 hrs. of light. It measures 94 mm. (S-V length). It is toe-clipped #17. It was captured aug. 11, 1960, 3 mi. N.W. of Palm Springs.

Mayhew 1961

Uma inornata

July 19 — UCR, Riverside Co., Calif.

#17 is beginning to show signs of red along the sides of the body.

Aug. 8 — Two eggs were found in the damp sand at one end of the terrarium in which we are keeping some ♀♀ that appear gravid. These eggs apparently were laid by #14 (58 mm. S-V length) (??) since she was seen digging a hole in the sand last evening. The hole was covered this morning, so I looked for eggs. They were at the bottom of the terrarium about 3" from the original entrance to the hole. The eggs measure:

21.1 mm. X 11.4 mm.
20.0 " X 12.4 "

They have been placed in a fingerbowl of moist sand in the laboratory. The ♀ that laid the eggs has considerable tinges of orange on her sides & tail as well as the sides of her head.

Sept. 22 — Today 10 animals were placed in outdoor cage #2. They are (7 ♂, 3 ♀):

No.	sex
1	♂
6	♀
7	♂
8	♀
10	♂
11	♀
15	♂
17	♂
19	♂
20	♂

Sept. 22

UCR, Riverside Co., Calif.

These animals will be held in this cage through the next breeding season in the hopes that some young will be produced successfully in captivity under semi-natural conditions.

At the same time the following animals (2 ♂, 8 ♀) were placed in indoor cage # 4:

No.	sex	No.	sex
9	♀	18	♀
12	♂	21	♀
13	♀	22	♀
14	♀	27	♀
16	♂	116	♀

These animals are not quite adult. Starting today, they will receive 24 hours of light per day in an attempt to get them into breeding condition in the winter.

All of the juveal animals were divided into 2 equal groups. One group was placed in indoor cage # 3. These animals will continue receiving 11 hours of light per day. They are the control animals. The second group was placed in indoor cage # 5. They will receive 24 hours of light per day, beginning today. Both groups

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Uma inornata

Sept. 22

UCR, Riverside Co., Calif.

will be weighed & measured each week to check the effect of additional light on their growth rates. There are 4 animals in each group:

cage #3 (11 hours)		cage # 5 (24 hours)	
No.	Sex	No.	Sex
2	♀	3	♀
4	♀	5	♂
25	♂	23	♂
26	♂	24	♀
(2 ♂, 2 ♀)		(2 ♂, 2 ♀)	

Sept. 23

#13 was found dead in cage # 4 today. It wasn't possible to tell the cause of death.

Nov. 3

Since I can't tell whether ♀ of this species or other species of Uma are laying eggs in the 24 hour incubation cage (1 egg laid this morning) this species has been moved into cage # 5 with the Dipsosaurus dorsalis on 24 hours of light. Then if any eggs turn up in this cage, I will know which species laid them.

All animals in the incubation cage were checked for breeding colors & eggs or enlarged hemipenes today.

No.	sex	S-V	Breeding colors	Remarks
9	♀	68	none	no eggs
12	♂	69	none	no enlarged hemipen.
14	♀	62	slight	no eggs
16	♂	74	slight	no enlarged hem.

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Uma inornata

Nov. 3 — UCR, Riverside Co., Calif.

No.	Sex	S-V	Breeding Colors	Remarks
18	♀	62	none	no eggs
21	♀	60	slight	" "
22	♀	62	slight	" "
27	♀	73	none	" "

Nov. 20 — Animals were checked for breeding condition in the incubation chamber:

No.	Sex	Breeding color	Breeding condition
9	♀	none	1 medium egg each ovary
12	♂	"	(very thin) no E. H.*
14	♀	slight	no eggs
16	♂	slight	slight E. H.
18	♀	none	no eggs
21	♀	slight	no eggs
22	♀	slight	no eggs
27	♀	none	no eggs.

Nov. 27 — All 24-hour reproduction cage animals were weighed & measured today. Their breeding conditions were as follows:

No.	Sex	S-V	Breeding Color	Breeding Condition
9	♀	69	some	(med.) 1 egg - each ovary
14	♀	63	slight	1 med. egg - rt. ovary
16	♂	74	some	slight E. H.
18	♀	—	———	———
21	♀	60	none	no eggs
22	♀	63	very slight	(small) 1 egg - each ovary
27	♀	73	none	no eggs

Dec. 6 — All lizards were checked for their reproductive condition today:

*E.H. = enlarged hemipenes

Mayhew
1961

Uma inornata

Dec. 6

UCR, Riverside Co., Calif.

No.	Sex	S-V	Breeding Color	Breeding Condition
9	♀	69	some	1 egg - each oviduct
14	♀	63	yes	1 large egg - left ovary 1 egg - right oviduct(?)
16	♂	74	some	slight E. H.
18	♀	62	some	1 large egg - rt. ovary
21	♀	60	none	no eggs
22	♀	64	slight	1 large egg - each ovary
27	♀	73	none	1 small egg - rt. ovary

Breeding colors in the ♂ appears to consist of a slight orange tinge on the sides of the body, reddish-orange around the eyes & mouth. Breeding colors in the ♀ appears to be similar to the ♂, but in addition she contains reddish-orange in the axilla of the forelegs, along the posterior side of the forelegs down to the elbow (occurs behind humerus), and along the outer edges of the tail in the posterior one-half. On #14 the brightest colors appear on the posterior sides of forelegs and in axilla, around the eyes and mouth, then the color along the tail, followed by the tint of orange along the sides of the body. (The colors mentioned above are in decreasing brightness.) So far the ♀♀ have been more colorful than the ♂.

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1961

Uma inornata

Dec. 11

UCR, Riverside Co., Calif.

No.	Sex	Breeding Color	Breeding Condition
9	♀	some	no eggs
14	♀	yes	1 large egg - left ovary 1 egg - right oviduct (?)
16	♂	slight	E. H.
18	♀	some	1 egg - right oviduct
21	♀	none	no eggs
22	♀	some	1 egg - each oviduct
27	♀	none	no eggs

Dec. 14

#14 is digging extensively now. The egg in the left oviduct is rather hard.

Dec. 18

all incubation animals palpated today. Results:

No.	Sex	S-V	Breeding Color	Breeding Condition
9	♀	69	some	no eggs
14	♀	63	yes	1 egg - right oviduct (?)
16	♂	74	some	E. H.
18	♀	62	some	no eggs
21	♀	60	very slight	no eggs
22	♀	64	some	1 egg - each oviduct
27	♀	73	none	1 small egg - rt. ovary

Dec. 26

No.	Sex	Breeding Color	Breeding Condition
9	♀	slight	~~no eggs~~
14	♀	yes	~~1 egg - right oviduct (?)~~
16	♂	some	E. H.
18	♀	some	no eggs
21	♀	none	no eggs
22	♀	some	no eggs (?)
27	♀	none	1 med egg - rt. ovary

#14 was dissected today, since it appears to be sinking rapidly. #18 was dissected also because she is blind. The autopsy results:

Mayhew
1961

Uma inornata

Dec. 26

UCR, Riverside Co., Calif.

#14 contained a disintegrating egg in the body cavity, as clearly as I could make out. Her body cavity was all messed up. She had the appearance of having been dead for some time, even though I killed her a few minutes before autopsy. It seems possible the oviduct wasn't large enough to handle an egg of that size — this could have produced her difficulties. She looked in good shape about a week ago, & was digging as though she was getting ready to lay. The oviduct was convoluted, but was rather small. The left ovary contained one enlarged egg that had a large red spot on one side of it. This egg also was in bad shape. The right ovary contained only one small egg that I could see.

#18 contained only 2 small eggs (<1mm) in each ovary. Neither oviduct was convoluted. The ovaries appeared to be abnormal for an animal that size - (62 mm). Usually several eggs are in each ovary, even though the eggs are quite small. There was little shape to the ovaries at all - I couldn't have told those were ovaries without seeing the tiny eggs.

Mayhew 1962

Uma inornata

Jan. 2

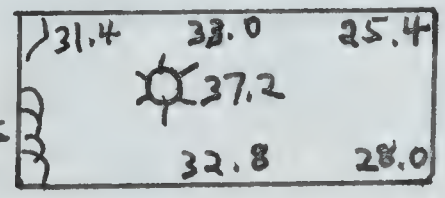
UCR, Riverside Co., Calif.

No.	Sex	Breeding Color	Breeding Condition
9	♀	slight	no eggs
16	♂	yes	E. H.
21	♀	none	no eggs
22	♀	slight	no eggs (?)
27	♀	none	1 med egg - rt. ovary

Jan. 8

No.	Sex	Color	Condition
9	♀	slight	no eggs
16	♂	yes	E. H.
21	♀	slight	no eggs
22	♀	slight	no eggs (?)
27	♀	none	1 med. egg - rt. ovary

Loree Octoff Schumacher told me today that the lizard given her on June 23, 1961 (#17) has never tamed down. It is in fine shape, but has never laid an egg. It stays under the sand a good deal. During the winter, it comes out only every couple of weeks to eat. She thinks it is hibernating. The temperatures in the cage are:



Feb. 5

No.	Sex	S-V	color	Condition
9	♀	69	slight	no eggs
16	♂	76	some	E. H.
22	♀	64	some	no eggs
27	♀	73	none	1 med egg - rt. ovary

Mayhew
1962

Uma inornata

Feb. 5

UCR, Riverside Co., Calif.

Two eggs were on the surface of the sand in this cage today. They were quite dessicated. I wasn't able to check the animals recently as often as they should have been. Consequently, I'm not positive which lizard laid the eggs. However, #22 possesses the most color of the 3 ♀ left. Also, she appeared fatter last week than she does now. Although she is the smallest ♀ of the group, I feel she is responsible for the eggs. Neither of the other ♀ contains any appreciable orange color at all.

Feb. 19

No.	Sex	S-V	Color	Condition
9	♀	69	none (blind)	no eggs
16	♂	76	some	E.H.
22	♀	64	slight	no eggs
27	♀	73	none (thin)	1 med egg - rt. ovary

#9 was autopsied because it is blind.

Mar. 28

Palm Springs, Riverside Co., Calif.

Today Walt Mobley & I saw 17 of these animals while we were in the area. Lloyd Tevis told us he saw the first ones this season last Sunday (Mar. 25). Judging from tracks, not too much activity has occurred yet. We captured 11 lizards, 4 of which we released after measuring their temperatures (immature animals).

June 21

Palm Springs, Riverside Co., Calif.

Walt Mobley & I found a small wash just east of the subdivision on Vista Chino that has the brick wall on the north side of it. The *Larrea divericata* in this very shallow depression was quite green, whereas all the other *Larrea* nearby was very dead-looking. This green belt was only about 30 yards wide and about 1/4 mile long. The lizards normally living in the surrounding terrain apparently have concentrated in this belt of vegetation — probably because more food is available here. At any rate, we were able to capture 20 lizards of this species (all adults) in approximately 2 hours at this location. I haven't seen this species so abundant at any location for several years (spring, 1959). The surrounding areas seemed to possess far fewer animals today.

Dissection of ♂♂ revealed that the breeding season may be about over for them. Several possessed sperm in rather large quantities in the epididymis, but the vas deferens appeared to be empty — at least, the terminal portion did. This is

Mayhew 1962

Uma inornata

June 21

Palm Springs, Riverside Co., Calif.

in contrast to the condition found today in Dipsosaurus dorsalis collected in the same area. These animals also appear to be reaching the end of the reproductive season. However, Dipsosaurus possess sperm in the vas deferens, but the epididymis appears to be clearing. Although lots of sperm were present in the vas deferens, few sperm were found to be motile.

June 25

UCR, Riverside Co., Calif.

The ♀ adult that was given to Loreé Ostroff June 23, 1961 (caught Aug. 11, 1960) laid 3 eggs today. These are the first eggs it has laid in captivity even though it has received 24 hours of light (incandescent bulb) since June 23, 1961. (74 mm S-V at exposure.)

(#17)

Sept. 6

Loreé Ostroff's female (#17) laid 2 more eggs today. They were very dessicated by the time I saw them.

Dec. 10

Loreé Ostroff's lizard (#17) was found dead this morning. It was thrown away before I got a chance to autopsy it.

Dec. 19

a ♀ 70 mm S-V was dug out of outdoor cage #2 this morning. It was tat-clipped # 8. This animal was

Mayhew 1962

Dec. 19 UCR, Riverside Co., Calif.

placed in the outdoor cage on Sept. 22, 1961. The others that were placed in there at the same time were apparently buried too deep to dig out when Walt Mobley placed a large load of sand in that cage during the winter of 1961-62. She had measured 54 mm (S-V) when she was captured at Palm Springs Apr. 8, 1961. She measured 65 mm (S-V) when placed in the outdoor cage. She was given to Loree Ostroff today to put on 24 hours of light per day. She is red around the eyes, and a few scales on her chin are red, but that is all the color she possesses. She is thin, but not in bad shape at all. She was on the surface when first seen, but she ran to her burrow immediately. I carefully dug out the burrow system. It was a rather straight tube 21 inches long, descending at an angle. The end of the tunnel was 11 inches below ground surface. The lizard was lying U-shaped at the end of the burrow when I uncovered it. The lizard's cloacal temp. was 17.0°C when I caught it in the burrow, even though the soil temp. at 11" was 14.8°C. Soil surface temp. was 31.5°C, air temp. (1 m) - 21.6°C. The day was sunny & bright.

Mayhew 1963

Uma inornata

Feb. 20 — Palm Springs, Riverside Co., Calif.

These animals were active today from 1010 to 1515. However, only 1 was seen after 1445. The weather began to cool perceptibly after 1500. (See Journal, 1963, p. 12, for list of times seen.) Temperatures and S-V lengths were obtained from 16 lizards today. The temps. and time of day are:

AM	PM
31.0°C.	38.4°C
36.8	38.6
37.6	32.8
36.4	36.2
39.4	36.0
38.2	37.2
$\bar{X}$ = 36.6	37.0
	38.8
	37.4
	36.2
	40.0
	$\bar{X}$ = 37.1

Feb. 15 — UCR, Riverside Co., Calif.

#8, placed on 24 hours of light / day 19 Dec. 1962 by Loree Ostroff, laid 3 eggs. They were dessicated by the time Loree found them

Mar. 6 — Mira Loma area, Riverside Co., Calif.

See pages 4-5 of Journal for details of transfer & release experiments.

Mar. 13

Palm Springs, Riverside Co., Calif.

The day was devoted to seeing when this species is active in March. Consequently, most of the day was spent driving the roads in Palm Springs Panorama & recording when these animals were active. A total of 85 animals were seen, 16 of which were captured. The times the animals were seen, & the number seen at each time, are as follows:

0915–1	1430–1	1625–11
0945–1	1435–1	1640–11
0950–11	1440–1	1650–1
0955–11	1445–111	[#8, caught today 5 mi.
1000–111	1450–1	N.W. of 1000 Palms (S-V:
1005–𝍸 11	1500–11	82 mm today) was marked
1010–111	1510–111	at that site 18 May 1961
1015–11	1515–111	(S-V then: 56 mm). The
1020–1	1520–11	lizard is a ♀.]
1025–11	1525–1	
1045–1	1530–111	
1055–1	1535–11	
1115–1	1540–𝍸	
1135–1	1545–11	
1145–1	1550–11	
1325–1	1555–11	
1400–1	1600–111	
1410–1	1605–1	
1415–1	1610–𝍸	
1425–11	1620–11	

Mar. 22

Mira Loma, Riverside Co., Calif.

This morning at 1040 I released 15 lizards at dune #4. The sand was damp just beneath the surface. A number of new annuals have emerged, but are not nearly big enough to flower yet. These animals were released beside a green bamboo stick I placed in the sand approximately 150 feet NW of the "For Sale" sign on the property.

April 11

Palm Springs, Riverside Co., Calif.

We looked for animals from 1000 to 1645 under nearly perfect conditions. In addition to the captured animals (20) we saw the following 55 lizards:

Time	No.	Time	No.	Time	No.
1100 –	1	1320 –	2	1610 –	2
1120 –	1	1325 –	2	1620 –	1
1125 –	2	1330 –	1		
1130 –	2	1340 –	2		
1150 –	2	1405 –	1		
1200 –	3	1410 –	1		
1225 –	1	1440 –	3		
1230 –	4	1447 –	1		
1235 –	1	1510 –	2		
1245 –	2	1530 –	1		
1255 –	2	1535 –	1		
1305 –	3	1540 –	1		
1310 –	3	1545 –	4		
1315 –	2	1600 –	1		

(No animals caught after 1615.)

May 22

Palm Springs Panorama, Riverside Co., Calif.

The following animals were seen (163) today between 0700 and 1700:

0705-1	1035-1	1335-11	1610-1
0720-1	1040-1	1345-1	1615-1
0725-1	1045-11 open 1050-111 (Shade)	1350-1	1620-11
0750-1	1055-1	1355-1	1630-11
0800-11	1105-1	1400-1111	1635-11
0805-1	1110-11	1405-1	1640-1
0810-111	1115-11	1410-1	1650-1
0815-1	1120-1	1415-1	
0825-11	1125-1	1420-11	
0830-1	1130-1	1425-11	
0835-111	1140-11	1430-111	
0845-11	1145-111	1435-11	
0900-11	1150-1	1440-1 shade	
0905-11	1155-1	1445-1 open	
0910-1111	1200-11	1450-1	
0915-1	1205-1	1505-111	
0920-11	1210-1	1510-11	
0930-111	1215-111	1515-111	
0935-1111	1230-1	1520-1	
0945-11	1235-1	1525-1	
0950-11	1240-1	1530-11	
0955-1111	1250-1	1535-1111	
1000-1	1255-1	1540-11	
1010-11	1300-1	1545-1	
1015-1111	1305-1	1550-1111	
1020-1	1320-1	1555-11	
1025-11	1325-1	1600-1	
1030-11	1330-1111	1605-1	

Mayhew 1963

Uma inornata

May 22

Palm Springs Panorama, Riverside Co., Calif.

From 1050 to 1440 all the animals were in deep shade beneath Oleander plants, behind palm trees, or in the shade of "Sold" signs. Normally these animals would have had to be under the ground at this time, but the unnatural circumstances of the Panorama permitted them to be above the ground. None of the natural vegetation in the area apparently created enough shade to permit them to stay above the ground, since no lizards were seen beneath natural vegetation except during the periods animals were also out in the open.

June 7

We looked for animals from 0725 to 1120. During that period we captured 24 and saw an additional 6H. Conditions are so dry everywhere else that very few lizards of this species can be found these days. However, these animals are very abundant here. I am convinced this is due to all the watering that occurs here in the Panorama. The vegetation is quite abundant and dense here, which should produce lots of insect food for these lizards.

Mayhew
1963

June 7

Uma inornata

Palm Springs Panorama, Riverside Co., Calif.

The times lizards were seen, but not collected, are:

0725-I	0905-III	1005-II
0755-II	0915-I	1010-IIII
0800-III	0920-I	1015-I
0805-I	0925-III	1020-II
0815-I	0930-II	1030-I
0830-II	0935-III	1045-I
0835-I	0940-III	1050-I
0840-I	0945-III	1055-II
0845-I	0950-IIII	1100-II
0850-II	0955-I	1110-II
0855-III	1000-II	1115-II

Uma notata

Uma notata

Uma notata

Mayhew
1957

Mar. 30 Salton Sea, Imperial Co., Calif.

Two young ones were caught in the sand dunes between Niland and Amos, Imperial Co., Calif. No large ones were even seen. These were caught during the middle of the afternoon.

1958

May 12 Univ. Calif. campus, Riverside, Riverside Co., Calif.

This afternoon a ♂ ran across the lizard cage outside greenhouse 16 and bounced up + down in front of a ♀. almost immediately he ran behind her, then grabbed a piece of skin on the back of her neck in his mouth, and lay down with his body beside hers. A moment later he placed one hind leg over her body and rolled the back of her body so that the cloacal region of each came into contact. Thus, the ♀ was lying on her belly with the hind leg region turned to one side while the ♂ essentially was lying on his side, except for his head which still was on top of the neck of the ♀. This position was maintained for approximately 5 minutes, then the ♂ released his hold and walked a few paces away from the ♀. About 2 minutes later he walked up to the ♀ with that bouncing action again, but the ♀ turned and faced him with her back

May 12 Univ. Calif. campus, Riverside, Riverside Co., Calif. raised slightly. With this response on her part, the ♂ turned and walked away to the other side of the cage.

July 18 This morning I left 3 ♀ in glass containers in the sun too long, so they died. They were brought in at 0920, but by that time the surface temp. was 52°C. (126°F.). These were animals that were collected in the Sand Hills, 14 miles west of Winterhaven, Imperial Co, Calif. on June 12, 1958. Two of them were preserved, but I opened the third one because I thought she was gravid. Sure enough, she contained one large egg in each ovary and several small ones (4 in the left ovary, 5 in the right). The dimensions of the large eggs were: 9mm. for each of them. The eggs were spherical in shape. The sizes of the smaller eggs were:

Right ovary	Left ovary
0.5 mm.	1.0 mm.
1.0 "	1.5 "
1.0 "	2.0 "
1.5 "	3.0 "
2.5 "	

Frank opened a ♂ captured on the walking dunes, W. side of Salton Sea, Imperial Co., Calif. March, 1956. (#1) Left testis — 6.75mm. x 4.5mm.; right testis — 7mm. x 4.75mm.

Aug. 23 6 mi. W. of Glamis, Imperial Co., Calif.

A large number of young and several adults were seen on the sand dunes this morning. Several of each were captured. at 1530 hr. adult was seen running across sand where temp. was 47.5°C.

Aug. 24 UCR campus, Riverside Co., Calif.

When we opened the collecting sacks upon our return this evening, we found 2 freshly laid eggs in one of the sacks. One looked a little worse for wear, but the other one appeared to be all right. Both were set in the Vapor-temp. The eggs were quite soft and rather creamy in appearance.

Sept. 19 5 mi. W. of Glamis, Imperial Co., Calif.

Several of us reached the sand dunes west of Glamis at 1745 and tried to collect some specimens on the dunes. The sun went down at about this time. The air temp. was 34.7°C., & the soil surface temp. was 36.5°C. One adult ♂ was captured lying partly exposed on the surface. Some other adults and many young were seen during our stay at this location. It was almost totally dark when we left these dunes.

Oct. 31 Young animals were basking on the sand surface by 0900. at this time the air temp. was 22.6°C., the soil surface temp. was 31°C., the relative humidity - 55%.

Mayhew 1958

Uma notata

Oct. 31

5 mi. W. of Glamis, Imperial Co., Calif.
No adults were seen on the surface until 0942 when the soil surface temp. was 35°C. There are a tremendous number of juvenals in this region now. Not too many adults were seen, and those that were seen usually were successful in reaching a burrow before we reached them. However, nine adults were captured between 0942 and 1224. The range in air temp. during this period was from 21.1°C. to 24.4°C., and the range in soil surface temp. was from 35°C. to 42.5°C. Most of the animals were found at the base of steep dunes on the lee side. Vegetation is reasonably abundant in this location, and several times we found at least a dozen animals around a single large plant.

Nov. 14

The first adult was seen at 0945. The air temp. at the time was 21.6°C., the soil surface temp. was 26.2°C. Eleven ~~adults~~ animals were caught between then and 1307. The air temp. by that time was 24.5°C. & the soil surface temp. was 42°C. A few of these animals were adults, but the great majority of the active animals were juvenals. Adults were still active at 1315 when we stopped.

Nov. 14 — 5 mi. W. of Glamis, Imperial Co., Calif. At this time, air temp. was 25.6°C., soil surface temp. was 36.8°C.

Dec. 19 — We began looking for reptiles at 1050. The first lizard seen was a juvenal Uma, spotted at 1119. At this time the air temp. was 20.6°C., soil surface temp. was 32.5°C. Two juvenals were all that were caught today. Another half dozen juvenals were seen, but no adults at all. We stopped looking at 1330 to eat chow, then resumed looking at 1430. No reptiles of any kind were seen from until 1545, when we stopped searching.

1959

Jan. 24 — 5 mi. W. of Glamis, Imperial Co., Calif. The first lizard (immature) was seen at 0930. The first adult was seen at 1020. At this time the air temp. was 19.7°C., the soil surface temp. was 31°C. The last adult was seen at 1400, but we returned to the car at 1410. In all, 4 known adults were seen today, but none could be captured. As soon as they were disturbed by our approach, they disappeared into the nearest hole. A fairly large number of immatures were seen, and a dozen of them were caught. They seem to be in two size groups now — the

Mayhew 1959

Jan. 24 5 mi. W. of Glamis, Imperial Co., Calif.

difference in size is quite pronounced. They range in size (S-V length) from 43 mm. to 63 mm. I think the difference is due to the time of year they hatched. If this is true, it would indicate that this species has a long laying period. There are relatively few tracks on the dunes now, and almost none made by adults.

Feb. 5 We watched for animals from 0830 when we went into the dunes to get soil samples. However, we didn't start looking in earnest until 0950. The first animal found (a juvenal) was seen at 1000. At this time the air temp. (waist high) was 17.5°C., air temp. (1 cm. above surface) was 18.8°C., soil surface temp. was 26.6°C. We captured several young ♂♂ & ♀, and one adult ♂. Few other adults were seen, but large numbers of young were active. We had to stop looking at 1220, although adults had been seen only since 1130. It appeared they would be active for some time yet.

Mar. 21 These animals are becoming very active again. Even large adults are rather numerous on the surface now. We captured a total of 28 animals (9 ad. ♂, 3 adult ♀, 8 immature

Mar. 21 5 mi. W. of Glamis, Imperial Co., Calif.
♂, and 8 immature ♀). Of this number, 10 were released near the car, and the students were able to see how they burrow in sand, etc. These animals were captured first at 0915, and some of them were still active when we stopped looking at 1305.

Apr. 25 5 mi. W. of Glamis, Imperial Co., Calif.
Today, between 0710 and 1340, a total of 19 animals were captured — 8 adult ♂, 4 adult ♀, 2 immature ♂, and 5 immature ♀ — and retained. 3 adult ♂ were caught and released. The animal caught at 0710 was an immature ♀ that was found running itself on the pavement of the road. None of the other animals were caught before 1030, when we began looking for *Uma* in earnest. The sky was completely overcast today, but the animals were quite active. The animals didn't seem as prone to disappear down the nearest hole as in the past. Several times adults would run past several shrubs, then sit motionless on the exposed sand until we noosed them. Some of the animals were still active at 1430 when we stopped looking for *Uma*.

Mayhew
1959

May 22 Algodones Dunes, Imperial Co., Calif.

A half-grown animal was seen on the pavement at 1910 (deep dusk) tonight. At the time the air temp. (30") was 23.8°C., air temp. at 1 cm. was 26.0°C., and road temp. was 29.5°C. An attempt was made to capture it by hand, but it ran over the side of the road and disappeared down the side of the slope.

May 23 5 mi. W. of Glamis, Imperial Co., Calif.

These animals were abundant and active this morning. Large adults as well as young animals were seen. The number of young animals seen now is much lower than has been the case in recent months. Actually, they may not be so much less numerous than they seemed. It may be that because we are seeing many more adults, it just seems that the number of young have decreased markedly. When the surface of the sand warms up enough to cause the animals to disappear, we found this trip that many of them simply bury beneath the sand in the shade of some of the larger, denser perennials, particularly *Croton californicus* and *Ephedra* sp. By using hooks to disturb the sand beneath *Croton* bushes, for example, we uncovered and caught 8 animals under one bush +

May 23

5 mi. W. of Glamis, Imperial Co., Calif.

b under another one. They do not try to go to another plant usually, especially if the next plant is some distance away. Instead they usually go to the opposite side of the same plant & hide again or simply try to hide in the shade of the bush. By searching for large Croton plants at the warmer times of the day, and plowing up the sand beneath, one should be able to capture fairly large numbers of animals rather easily. We intend to test this technique during the summer.

June 11

The technique of probing beneath Croton plants didn't work for sour apples this trip. We didn't turn up a single animal there that we didn't chase into the bush first. The boundary area between creosote bush scrub and sand dune just east of the Coachella Canal produced very few animals this month, even though we caught several in this area in April. Callisaurus draconoides was the most numerous animal here this month.

July 20

Most of the population apparently is active from the time the soil cools down sufficiently to permit activity until shortly after sundown (or at

July 20 — 5 mi. W. of Glamis, Imperial Co., Calif.

least until sundown). We were able to capture 16 animals between 1630 and sundown, and saw many that we were unable to capture. Relatively few small animals are seen any longer. There are still a few, but they are not nearly so numerous as they were a few months ago.

Nov. 15 — 5 mi. W. of Glamis, Imperial Co., Calif.

A young animal was captured and released at 1045. It was a juvenal ♂ whose cloacal temp. was 33.1°C. It was first seen in the sun on open sand, and was captured after a 20 foot chase. Weather conditions at the time were:

air temp. (30") – 25.2°C.
" " (1cm.) – 26.0°C.
soil surface temp. – 36.9°C.
relative humidity – 48%
wind – S.W., 6–8 mph.

Uma notata

Audrey
1960

July 16 - Yuma Sand Hills, Glamis area, Imperial Co., Calif.

Some lizard activity was noted today ~~[illegible]~~ in the hour preceding sundown when the air temperature dropped to 42°C. All the lizards seen were small and only two females were taken, primarily because of the extreme wariness of the lizards. Nearly all activity had ceased by 15 minutes after sundown (1845)

July 17 - Yuma Sand Hills, Glamis area, Imperial Co., Calif.

Uma were active today when we arrived at the collecting area at 0610 and continued active until around 0930. The larger adults were very wary and ran to holes upon seeing us, even at distances of 100 feet and more, during the early part of the activity period. It was only near the end of the activity period that we began to catch large males. Even then they were still quite wary. Altogether in these two days 20 Uma notata were taken, including 7 adult ♂,

Audrey
1960

Uma notata

July 17 - Uma Sand Hills, Glamis area, Imperial Co., Calif.

8 adult females (1 gravid), 4 imm. ♂♂ + 1 immature ♀. Temperature at which activity practically ceased was 39°C.

Mayhew
1960

Uma notata

Nov. 10

UCR campus, Riverside Co., Calif.

This morning Walt Mobely brought in 2 eggs that had been laid by one of ("Broken-tail") ↓ Loree Ostroff's pet lizards. These two animals were given to her this past July. They were captured in the Yuma Dunes west of Glamis, Imperial Co. The eggs measured 22 mm. X 12 mm. in each case. One of them was filled with totally dry yolk, whereas the other one contained a bit of runny yolk as well as dried yolk. The eggs were found in the cage this morning on top of a rock. It is believed that the light, which was on in the cage all night dried the eggs out to their present consistency. I talked to Loree about her treatment of these animals, and looked at the animals themselves. Both lizards are ♀, and both possess full breeding colors. The sides of the body are brilliant orange. The one that didn't lay also has bright orange along the sides of the tail. She is quite plump, appearing as if she may lay some eggs in the near future. Loree feeds them lots of mealworms & has the light in the cage burning 24 hours a day. The lizard that laid is 70 mm. in S-V length

Nov. 10

UCR campus, Riverside Co., Calif.

The other lizard measured 71 mm. in S-V length. Thus, both are at what we consider to be the smallest size for adults.

Nov. 22

at approximately 1245 today Loree Ostroff's ("Gertrude") other lizard laid 2 eggs. These eggs measured 22.0 X 13.0 mm. and 24.0 x 13.0 mm. One of the eggs was laid in the drinking pan. About 40 minutes later they were both being incubated in the Vapor-Temp. at 90° F., relative humidity of 96% (wet bulb at 89°F.). The eggs were set on moist soil in a Petri dish. The ♀ still is bright orange on the sides and on the sides of the tail.

Nov. 30

Both eggs were looking rather decrepid by now, so they were dissected. There was no sign of an embryo in either egg — only a formless mass of yolk that was still quite liquid. One egg was rather misshapen, but the other one had changed shape relatively little. I think the relative humidity is too high when the eggs are maintained on moist soil. I think their response may be something like I found in mallard eggs, namely too high a humidity was detrimental when moisture was added to the eggs directly. Therefore, in the future, I think I should set the relative humidity at about 75% to see what happens

Mayhew
1960

Dec. 9

UCR campus, Riverside Co., Calif.

about noon today one of Loraé Ostroff's lizards began to lay eggs again. It was the one with the previously broken tail (the lizard that laid eggs first last month). This time she laid 3 eggs whose measurements are: 11 X 20 mm.

12 X 22 "

11 X 20 "

Since the other eggs appeared to be infertile, no attempt was made to incubate these eggs.

Dec. 12

The lizard (♀) Walt brought in from our outdoor cage on Nov. 23, 1960 has just begun to eat mealworms. Walt named her "Lulu" — much of her tail is missing. (She is with Loraé's other lizards.)

Dec. 14

"Lulu" is eating about as many mealworms as Loraé's other two lizards now. She is beginning to get brighter colors than she had when first brought in.

Dec. 21

"Gertrude" (the lizard with the entire tail) laid 4 eggs at noon today. They measured:

17.5 X 11.0 mm.

18.0 X 12.0 "

18.0 X 11.0 "

19.0 X 12.0 "

1961

Jan. 3

"Lulu's" sides are quite bright orange now, & it feels as though she has an egg in each oviduct.

Jan. 16

UCR campus, Riverside Co., Calif.

Five or six adults were active when I approached the out-door cages at 1230 today. This is the first day I have seen any of them active for over a month, although I haven't looked every day. Most of them appear quite fat & healthy.

Jan. 24

"Lulu", placed in 24 hours of heat & light on Nov. 23, 1960, laid 2 eggs between 1300 & 1330 today; 2 months after the light treatment started. The eggs had the following measurements:

18 X 12 mm. ; 21 X 13 mm.

Both eggs were placed on damp sand in a Petri dish immediately and placed in the Vapor Temp. at 90°F. and 75% relative humidity. Both of the remaining lizards are very fat & perhaps are carrying eggs, but no eggs can be definitely identified by palpation. Nevertheless, large amounts of something can be felt through the abdominal walls.

Jan. 27

75% relative humidity apparently is too low to successfully incubate lizard eggs on the top of sand. Both of "Lulu's" eggs were hard this morning — completely dried out. Walt Moberly opened both eggs, but there was no trace of an embryo.

Jan. 27

"Broken tail" laid 3 eggs today between 1330 and 1430. She laid her last clutch on Dec. 9, 1960. The eggs this time

Jan. 27 UCR campus, Riverside Co., Calif.

measured as follows: 22.0 X 12.0 mm.
18.5 X 13.0 "
22.0 X 11.0 "

"Gertrude" appears to be gravid again also. "Broken-tails" eggs were not incubated this time.

Feb. 3 Glamis area, Imperial Co., Calif.

25 young animals were captured today to compare with those we have held over the winter. Their weights and measurements are as follows: (& Kelp # 20 to 25, Bill Tuesdell gets # 1 to 19)

Lizard No.	Sex	S-V length (mm)	Weight (gms)
20	♀	46 mm	2.9 gm
21	♀	40 mm	2.2 gm
22	♀	48 mm	3.0 gm
23	♂	49 mm	3.7 gm
24	♂	55 mm	5.0 gm
25	♂	50 mm	4.5 gm
1	♂	52 mm	4.4 gm.
2	♀	53 mm	4.5 gm.
3	♂	52 mm	4.5 gm.
4	♀	49 mm	4.4 gm.
5	♀	51 mm	3.8 gm.
6	♂	47 mm	3.0 gm.
7	♀	44 mm	3.2 gm.
8	♀	49 mm	3.4 gm.
9	♂	48 mm	3.4 gm.
10	♂	51 mm	3.9 gm.
11	♂	54 mm	5.6 gm.
12	♀	44 mm	2.3 gm.
13	♀	60 mm	7.6 gm.

Feb. 3

Glamis area, Imperial Co., Calif.

Lizard No.	Sex	S-V length (mm.)	Weight (gms.)
14	♂	62 mm.	7.5 gms.
15	♀	44 mm	3.4 gms
16	♀	55 mm	5.5 gms
17	♀	55 mm	5.4 gms
18	♀	53 mm	4.4 gms
19	♀	53 mm	5.1 gms

Six adults + 55 young animals. Tracks on the sand indicated that few adults are active yet.

Feb. 12

UCR campus, Riverside Co., Calif.

"Gertrude" laid 3 eggs this week-end. They were totally dessicated by the time they were found, so no measurements could be obtained from them. However, they appeared to be the same size as the previous eggs. Loreé says that for 4 or 5 days before eggs are laid, the gravid female spends most of her time digging in the soil in the bottom of the cage. The last clutch of eggs laid by "Gertrude" was on Dec. 21, 1960.

Feb. 26

"Lulu" laid 2 eggs today, but they were completely dessicated before they were found. Therefore, no accurate measurements were possible; however, they measured 17 mm. and 18 mm. in length. Her last clutch of eggs was laid on Jan. 24, 1961. She is still being exposed to 24 hours of light daily (incandescent bulb).

Mar. 8 — UCR campus, Riverside Co., Calif.

"Broken-tail" laid 3 eggs during the night. They were dessicated when Lorei found them this morning (Mar. 9). The measurements in the dessicated condition were: 20 mm. x 10 mm.
18 " x 11 "
19 " x 10 "

Mar. 21 — "Lulu" was stepped on & killed today. When I dissected her, I found a very large egg in each ovary (12.3 mm. and 13.7 mm.). No trace of previous corpora lutea could be found.

Mar. 27 — 5 mi. W. of Glamis, Imperial Co., Calif.

29 young animals were caught today for our growth study. These animals were ~~weighted~~ weighed and measured today. The results were:

#	Weight (gms)	Length (mm.)	#	Weight (gms)	Length (mm)
1	3.5	48	15	9.0	68
2	5.4	58	16	5.2	55
3	5.7	59	17	9.3	68
4	3.3	48	18	3.3	49
5	3.5	48	19	4.9	53
6	7.4	62	20	4.6	53
7	4.6	52	21	5.1	55
8	4.2	53	22	5.3	55
9	6.6	59	23	5.6	56
10	5.1	58	24	5.5	54
11	5.1	52	25	4.8	50
12	5.6	58	26	8.6	61
13	5.4	56	27	8.3	64
14	7.7	62	28	4.1	51
			29	4.2	49

April 6

UCR campus, Riverside Co., Calif.

One of Loree's lizards is still in good shape, but the other one has become blind. Its tail is getting quite thin, but this is apparently the result of its inability to eat. However, Loree has tried to force feed it without success. These animals are exposed to soil surface temperatures ranging from 26.2°C. at one end of the aquarium (12½" x 12½" x 24") to 29.4°C. directly beneath the 60 watt incandescent light bulb that is used to heat the cage. Both ♀ still possess the bright orange on the sides of the body that is characteristic of the breeding season. (Soil in aquarium is about 2 inches deep.)

July 11

5 mi. W. of Glamis, Imperial Co., Calif.

The following young animals were toe-clipped, weighed, & measured tonight:

no.	sex	wt (gms.)	S-v length (mm.)
59	♀	14.0	80
72	♂	7.9	65
91	♀	7.9	64
92	♂	12.5	76
93	♂	13.1	76
94	♂	12.0	76
95	♂	11.9	74
96	♂	11.8	74
97	♂	12.0	76

Mayhew
1961

Uma notata

5 mi. W. of Glamis, Imperial Co., Calif.

July 11

No.	Sex	Wt. (gms.)	S-V (mm.)
98	♂	12.8	78
99	♀	8.1	69
114	♀	8.8	69
115	♀	7.7	68
116	♂	8.1	69
117	♀	8.0	65
118	♀	7.3	62
119	♀	6.4	60
120	♀	9.6	70
121	♂	7.7	66
122	♀	8.1	65
123	♀	8.2	65

Only 2 of these 21 animals had been captured and marked previously. Several of these had bright reddish-orange sides.

July 13

UCR, Riverside Co., Calif.

an adult ♀ was given to Betty Aaron for a skeleton preparation. It had bright orange on its sides. It measured 70 mm. (S-V length). The left ovary contained 7 eggs, the biggest being 2.7 mm. in diameter. There was 1 fresh corpus luteum in that ovary. The right ovary contained 6 eggs, the largest being 2.6 mm. in diameter. No corpora lutea were to be seen in this ovary. She seemed to be rather thin, but this was true of many caught this week.

Uma notata

July 17

UCR, Riverside Co., Calif.

at about 1400 today a ♀ tat-clipped #5, that had been given to Loree Ostroff June 12, 1961, laid 3 eggs. This animal had been captured in the algodones Dunes, Imperial Co., Calif. on Aug. 9, 1960. It had been kept in an outdoor cage at UCR from then to June 12, when Loree put it in a terrarium that is exposed to 24 hrs. of light per day. These eggs were very dessicated when I saw them. However, their measurements were:

20 × 11 mm.
21 × 12 "
21 × 13 "

This animal is very reddish-orange on the sides. In addition, it possesses this same color on the rostrum, the tail, the ear flaps, and in the axilla. It now measures 81 mm. S-V length.

Aug. 3

UCR, Riverside Co., Calif.

at 0744, when I entered my office I saw #24(♂) gripping #22(♀) by a piece of skin at the back of the neck. He was standing directly above her. Occasionally he would vibrate his front paws alternately. After about 1 minute he began scratching at her side with both front and rear feet on the

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1961

Aug. 3

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same side of the body. He would alternate from left side to right side, then back again. It appeared he was trying to get her body off the ground on one side or the other so that he could get his tail beneath hers. After possibly a dozen such attempts in rapid succession, he was finally able to get his tail and one hind leg beneath her tail. He then succeeded very quickly in placing one hemipenes in her cloaca. He entered from the left side of her body. After 2 rather weak pelvic thrusts, both animals lay perfectly still. The only motion to be seen was the ♂ breathing. The ♀ closed her eyes when the ♂ succeeded in penetrating her. She opened her eyes twice during the mating, but closed them very quickly again. Three minutes and 15 seconds after the ♂ entered the ♀ cloaca, he quickly let go of the ♀, stood up and walked away. There were no pelvic thrusts preceding their disengagement. The ♀, upon examination afterwards, feels as though she has an egg in one oviduct now. She is 60 mm. S-V length, he is 79 mm. Both are bright orange on the sides.

Aug. 3 UCR, Riverside Co., Calif.

The animals are in a terrarium 24" x 12½" x 12½" with 4 ♀ *Uma inornata*, 1 ♀ *Uma scoparia*, 2 other ♀ *Uma notata* and 2 ♀ *Phrynosoma m'calli*. Only one of these (♀ *U. notata*) paid any attention to the proceedings. She simply walked over and bit off a piece of skin that the ♂ was shedding (he was shedding a great deal). Then she walked away and ignored the activity. This response occurred while the ♂ was attempting to enter the cloaca of the ♀.

Aug. 21 Glamis area, Imperial Co., Calif.

The following animals were weighed, measured, & released at capture site:

no.	sex	length (mm)	weight (gms.)
64	♀	62	7.5
97	♂	78	12.3
124	♂	77	10.5
125	♀	70	7.4
126	♂	74	10.4
127	♀	68	7.7
128	♀	67	7.4
129	♂	76	10.3
130	♂	72	8.1
131	♀	60	5.9
132	♂	78	10.3

Aug. 24

UCR, Riverside Co., Calif.

Today the lizard I gave Loreé Ostroff on June 12, 1961 laid 5 eggs. Their measurements are:

19.0 x 12.5 mm.
18.2 x 10.4 "
17.9 x 11.5 "
18.7 x 11.5 "
19.0 x 10.6 "

This is the second clutch of eggs laid by this lizard (#5) since Loreé has had it on 24 hours of light per day (the 1st clutch was on July 17, 1961). She is still bright reddish-orange on the sides.

Sept. 10

This animal (discussed above) was found dead in its cage today (#577).

Sept. 22

Today 15 animals were placed in outdoor cage #2 (7 ♂, 8 ♀). They will be held through the next breeding season in this cage in the hope that they will reproduce successfully under semi-natural conditions. They are:

No.	sex	No.	sex
4	♂	24	♂
5	♂	28	♀
7	♂	33	♀
8	♂	46	♀
11	♂	48	♀
15	♀	50	♀
20	♀	51	♀
23	♂		

Uma notata

Sept. 22

UCR, Riverside Co., Calif.

At the same time 14 animals that are not quite adult were placed in indoor cage #4. Beginning today, these animals will receive 24 hours of light per day. An attempt is being made to bring these animals (4 ♂, 10 ♀) into breeding condition during the winter with extra light. They are:

No.	sex	No.	sex
3	♀	25	♂
9	♀	26	♀
13	♀	29	♀
14	♂	31	♂
16	♀	47	♀
17	♀	49	♀
18	♀	52	♂

All of the juvenals were divided into two equal groups. 11 were placed in indoor cage #3 as a control group. They will continue to receive 11 hours of light per day. The other 11 were placed in indoor cage #5, which will receive 24 hours of light per day, beginning today. These animals will be weighed and measured weekly (both groups) to determine the effects of additional light on the growth rate of young animals. They are:

Mayhew 1961

Uma notata

Sept. 22

UCR, Riverside Co., Calif.

cage # 3 (11 hours)		cage # 5 (24 hours)	
No.	sex	No.	sex
6	♀	1	♀
19	♀	2	♀
30 (20+10)	♂	10	♂
32	♀	12	♀
34	♀	22	♀
36	♂	27	♀
37	♀	35	♀
39	♂	38	♀
40	♂	42	♀
41	♂	43	♂
44	♂	45	♂
(6 ♂, 5 ♀)		(3 ♂, 8 ♀)	

Oct. 10 The first signs of courting behavior were seen in the 24 hour incubation cage. Two of the ♂ have become quite reddish-orange. One of them was displaying before a ♀ today.

Oct. 18 Courting display was seen once today, as well as 1 ♂ trying to chase another ♂ out of the cage. Both are in breeding colors.

Oct. 30 #16(♀) is digging a burrow beneath the water container in the 24 hr. incubation cage. She is fat, but I can't feel any eggs inside. One of the ♂ put on a defensive show (or courtship performance) this afternoon. He extended his gular

Oct. 30 UCR, Riverside Co., Calif.

fold, compressed his body laterally, and bobbed up & down to another lizard of the same species. This action drew no response from the other animal.

Nov. 3 One egg was found on the sand surface when I removed the cover on the 24-hour cage this morning. I'm sure it was #16, since she is the only ♀ that has been digging so far. all animals in the cage were checked for breeding condition today:

No.	Sex	S-V	Breeding color	Breeding condition
3	♀	64	yes	no eggs
9	♀	70	none	1 large egg - each ovary
13	♀	74	slight	no eggs
14	♂	72	"	E.H.*
16	♀	66	"	1 large egg - L. ovary
17	♀	69	none	no eggs
18	♀	66	"	no eggs
22	♀	65	slight	no eggs
25	♂	72	yes	E.H.
26	♀	71	slight	no eggs
27	♀	64	"	(very thin) no eggs
29	♀	71	"	no eggs
31	♂	78	"	no E.H.
47	♀	71	"	no eggs
49	♀	69	"	(very thin) no eggs
52	♂	75	none	no E.H.

Only #3, however, is in full breeding color.

* E.H. = enlarged hemipenes

Nov. 3

UCR, Riverside Co., Calif.

The egg that was found was very dessicated when seen, so I am unable to tell whether it was fertile or not. One of the ♂ is in full breeding color, so mating may have occurred.

Nov. 8

Another egg was found in the reproduction cage today. The hole dug by an animal yesterday near the water container was covered this morning, so I dug out the spot. a single, very soft, egg was found at the end of the burrow. I ruptured the "shell" in removing the egg from the sand. I feel sure this egg was laid by the same animal that laid the previous egg Nov. 3rd (either #3 or 16). Only #16 felt as though it had an enlarged egg about ready for release when the animals were checked Nov. 3rd.

Nov. 20

#9 was digging in the moist sand in the reproduction cage this morning. all animals were checked for breeding condition:

No.	Sex	Breeding colors	Breeding condition
3	♀	yes	no eggs
9	♀	yes	1 egg - each oviduct
13	♀	yes	1 " - " " (?)
14	♂	some*	E.H.
16	♀	slight	no eggs
17	♀	none	" "

* some is more than slight.

Mayhew 1961

Uma notata

Nov. 20

UCR, Riverside Co., Calif.

No.	Sex	Breeding Colors	Breeding Condition
18	♀	none	no eggs
22	♀	some*	1 medium egg - left ovary
25	♂	"	E.H.
26	♀	slight	no eggs
27	♀ (very thin)	"	" "
29	♀	"	" "
31	♂	some	E.H.
47	♀	"	1 medium egg - right ovary.
49	♀ (very thin)	slight	no eggs
52	♂	some	E.H.

The very thin animals (# 27 and 49) were killed to put them out of their misery. # 9 was digging in the moist sand by the water container. # 3 has one eye (right) completely closed today, so it was autopsied. Since it has been in breeding colors for some time, I wanted to know if it possibly laid any eggs. It measured 67 mm., S-V, after death. It had very large fat bodies on both sides of the body. The oviducts were convoluted, but did not appear to have had any eggs pass through, although this can't be said with any certainty. Left ovary contained 4 eggs, the largest of which measured 1.8 mm. The right ovary contained 3 eggs, the largest of which was 1.5 mm. I don't think she has laid. She

*(some is more than slight.)

Nov. 20 UCR, Riverside Co., Calif.
has been preserved as #■1E for future reference.

Nov. 21 #9 was captured in an extensive burrow dug beneath the water container in the moist sand. She hasn't laid any eggs yet, however.

Nov. 22 #9 has repeated her burrow system today after I destroyed it yesterday looking for eggs. The system is as extensive as before.

Nov. 24 This morning when I arrived the burrows made by #9 were caved, so I dug the area up to look for eggs. Two eggs were found against the wood floor of the cage as near to the glass on one side as possible. They were both in fine shape - turgid. They measured:

19.3 X 11.4 mm (blastodisc visible)
20.3 X 10.4 "

I placed them in moist sand in a plastic bag to see if I can incubate them successfully.

The largest ♂ in the 24 hour incubation cage was autopsied today to check on testis development in these experimental animals (toe-clip #31). He has been posturing for some time, and attacks the other U. notata ♂♂ that are in the same cage. He has reached what we consider adult size by now (82 mm. S-V). Both testes were quite enlarged (8.3 x 6.6 mm. and

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1961

Nov. 24

UCR, Riverside Co., Calif.

8.0 x 6.0 mm. respectively) and seminal fluid filled all the left vas deferens to within one mm. of the terminal end. The right vas deferens contained some seminal fluid to the same distance from the end, but there wasn't nearly as much seminal fluid in the right duct. The left vas deferens was cut so I could check for motile sperm. Lots of sperm were present on the slides I prepared, but not a single motile sperm was seen. This was true at the testis end of the vas deferens as well as at the terminal end. This is the first time I have seen seminal fluid near the end of the vas deferens without motile sperm being present. The animal was in full breeding colors. Three different smears were made of seminal fluid, each with the same result.

#9 was captured to be sure she was the lizard that laid the eggs. She was quite flat in the abdominal region, & no oviducal eggs could be felt this time, in contrast to earlier in the week. She seems to have an enlarged egg in the right ovary at present, however. This egg feels almost large enough to be released from the ovary shortly.

Mayhew 1961

Uma notata

Nov. 27

UCR, Riverside Co., Calif.

All animals in the 24-hour reproduction cage were weighed, measured, & checked for reproductive condition today:

No.	Sex	S-V	Breeding Color	Breeding Condition
9	♀	70	yes	no eggs
13	♀	75	yes	1 egg - each oviduct
14	♂	75	some	E. H.
16	♀	69	none	1 med. egg - left ovary
17	♀	70	"	no eggs
18	♀	66	"	" "
22	♀	68	some	no eggs (?)
25	♂	72	yes	E. H.
26	♀	72	slight	no eggs
29	♀	72	slight	no eggs
47	♀	72	yes	1 med egg - each ovary
52	♂	81	some	~~enlarged H. E~~ E. H.

Dec. 6

All animals were checked for reproductive condition today:

No.	Sex	S-V	Breeding Color	Breeding Condition
9	♀	70	yes	no eggs (left more advanced)
13	♀	75	yes	1 egg - each oviduct
14	♂	76	some	E. H.
16	♀	69	slight	1 large egg - left ovary; 1 med. " - right "
17	♀	70	none	no eggs
18	♀	66	none	no eggs
22	♀	68	some	no eggs (?)
25	♂	74	yes	E. H.
26	♀	72	slight	no eggs
29	♀	72	slight	no eggs

Mayhew
1961

Uma notata

Dec. 6

UCR, Riverside Co., Calif.

No.	Sex	S-V	Breeding Color	Breeding Condition
47	♀	72	yes	1 egg - each oviduct
52	♂	82	slight	E. H.

Breeding colors in ♀ consists of bright reddish-orange sides, red around the eyes, red around the edges of the mouth, red in the axilla of the forelegs. Breeding colors in the ♂ consists of bright reddish-orange sides, red around eyes + mouth, slight orange in axilla of forelegs, forelegs, hindlegs, back, + proximal portion of tail with orange diffusion. This is true down the entire length of legs + tail. No pronounced color near base of tail.

The 2 eggs incubated in moist sand since Nov. 24 were opened today. They were still quite turgid and contained liquid yolk, but no trace of an embryo was found in either egg.

Dec. 11

No.	Sex	Breeding Color	Breeding Condition
9	♀	yes	no eggs
13	♀	some	1 egg - left oviduct; 1 mid egg - rt. ovary
14	♂	some	E. H.
16	♀	slight	1 large egg - left ovary 1 egg - right oviduct
17	♀	none	no eggs
18	♀	none	no eggs
22	♀	some	no eggs (?)
25	♂	yes	E. H.
26	♀	slight	no eggs
29	♀	slight	no eggs

Uma notata

Dec. 11

UCR, Riverside Co., Calif.

No.	Sex	Breeding Color	Breeding Condition
47	♀	yes	1 egg - each oviduct
52	♂	some	E.H.

Dec. 12 #47 laid 2 eggs on the sand surface early today. Both of them were quite hard by the time I found them. They were about 2 feet apart at the cooler end of the cage. No attempt was made to bury them. The remains of a blastodisc was seen in both eggs.

Dec. 14 #13 looks like she is ready to pop. One egg in the left oviduct is quite hard now. It feels as though there is a very soft egg in the right oviduct.

Dec. 18 #13 was dead when we arrived today she was dissected, and found to contain 1 egg - left oviduct: 26.5 × 11.7 mm.; right oviduct unconvoluted. 1 large egg (7.5 mm) in right ovary; all small (≤ 1.7 mm) left ovary.

The others were palpated today. Results:

No.	sex	S-V	Breeding Color	Breeding Condition
9	♀	70	yes	1 large egg - each ovary
14	♂	79	yes	E.H.
16	♀	70	yes (-)	1 egg - each oviduct
17	♀	70	none	no eggs
18	♀	67	none	no eggs
22	♀	68	some	no eggs
25	♂	75	yes	E.H.
26	♀	72	yes (-)	1 med egg - rt. ovary
29	♀	72	some	no eggs
47	♀	73	yes	1 large egg - each ovary

Mayhew
1961

Uma notata

Dec. 26

UCR, Riverside Co., Calif.

No.	Sex	Breeding Color	Breeding Condition
9	♀	yes	1 egg - each oviduct
14	♂	yes	E. H.
16	♀	some	1 med egg - rt. ovary 1 egg - ~~right~~ oviduct
17	♀	none	no eggs
18	♀	none	no eggs
22	♀	some	no eggs
25	♂	yes	E. H.
26	♀	some	no eggs
29	♀	slight	1 egg - right oviduct (?)
47	♀	yes	1 large egg - each ovary

1962

Jan. 2

No.	Sex	Breeding Color	Breeding Condition
9	♀	yes	1 egg - each oviduct
14	♂	yes	E. H.
16	♀	some	1 egg - each oviduct ~~no eggs~~
17	♀	slight	no eggs
18	♀	none	" "
22	♀	some	" "
25	♂	yes	E. H.
26	♀	slight	no eggs
29	♀	slight	1 egg - each oviduct (?)
47	♀	yes	1 egg - rt. oviduct 1 egg - left " (?)

Jan. 3 ~~Dec~~

(no blastodisc)

#9 laid 2 eggs between 1700 yesterday and 0815 today. One was buried in the moist sand (19.7 × 11.5 mm), the other was lying on top of dry sand. It had been broken in some manner, so no measurement could be obtained.

Jan. 5

UCR, Riverside Co., Calif.

#9 apparently laid another egg in the moist sand. I found it late this afternoon. It was quite turgid, but no blastodisc was visible. It measured 21.8 × 11.6 mm. She last laid eggs on Nov. 24, 1961.

Jan. 8

no.	sex	Color	Condition
9	♀	yes	1 med egg - right ovary
14	♂	yes	E.H.
16	♀	some	1 egg - each oviduct
17	♀	none	no eggs
18	♀	none	" "
22	♀	some	1 egg - each oviduct (?)
25	♂	yes	E.H.
26	♀	some	no eggs
29	♀	some	1 egg - each oviduct
47	♀	yes	1 " - " "

#14 was autopsied today. (He is 5E in the records now.)

Jan. 11

#47 laid one egg (no blastodisc) on the sand surface this morning. It appears, from palpating the abdomen, this egg came from the left oviduct. It feels as though there is an egg still in the right oviduct. ♀ is still lightly colored.

#16 died this afternoon of unknown cause. She was autopsied (6E), and found to contain some spoiled eggs

Jan. 11

UCR, Riverside Co., Calif.

in the right oviduct. This probably contributed to her death. There were at least 2 eggs in the right oviduct, but they were so badly decomposed I couldn't determine the exact number. At least 1 corpus luteum could be seen in the right ovary, along with 5 eggs. However, the ovary was in bad shape as well, even though the animal was dissected a short time after death. (It appeared to be in bad shape at noon.) The left oviduct was convoluted & somewhat thickened posteriorly. However, it was not enlarged. The left ovary contained 5 eggs, one of which was large (7.2 mm). The sides of the body contained a tinge of orange, but nothing comparable to *U. notata* from the Algodones Dune area (this animal was collected in Sonora, Mexico). Traces of orange were present along the posterior portion of the tail on the lateral edges. Some orange was in the axilla & on the eyes. Nowhere was the color prominant, however.

It appeared she was unable to expel the eggs she contained, for one reason or another. Although she was 69 mm (S-V), she may have been too

Jan. 11

UCR, Riverside Co., Calif.

small to lay eggs that size. A similar development occurred in a young U. inornata recently in the laboratory.

Jan. 12

The first animal was seen in the outdoor cage today. Apparently the recent warm spell (to 88°F.) brought him out. It was #24 (♂). He still measures 87 mm (S-V). He is very fat in spite of his long stay beneath the sand without food. He is in full breeding colors, & he possesses enlarged hemipenes. He has been in the outdoor cage since Sept. 22, 1961. I don't recall the last time animals in this cage were fed.

Feb. 7

No.	Sex	S-V	Color	Condition
18	♀	67	none	no eggs
22	♀	68	yes	no eggs (blind)
47	♀	73	yes	1 egg - each oviduct

#22 was autopsied today because it has become blind. She had just laid 2 eggs yesterday, & 2 corpora lutea were present in the right ovary (none in the left ovary).

Feb. 19

No.	Sex	S-V	Color	Condition
47	♀	73	yes	1 egg - each oviduct (?)

Apr. 14

Glamis area, Imperial Co., Calif.

I had a group of students in the dunes from 0700 to 1100, & from

Uma notata

Apr. 14

Glamis area, Imperial Co., Calif.

1700 to 1815. The morning was spent in the area where we have a number of marked animals. However, not one marked animal was captured, although we caught over 30 animals here. Very few large adults were seen. There were very few tracks of large Uma to be seen either. Therefore, the afternoon group collected in a location we haven't used before. Nevertheless, the same situation prevailed at that location. Neither were tracks of large Uma abundant here.

May 13

Two immatures were captured & released. One of them (61 mm S-V)(♂) was running tail about one foot above the ground on the horizontal trunk of Eriogonum deserticola. The other (♀, 67mm S-V) was on the sand.

July 21

Five different animals were seen up in bushes the past 2 days. The highest were about 2 feet above the ground. We have seen a few in bushes before, but never so many on one trip. One juvenile animal was seen this trip – the first one we have seen this year.

1963

Mira Loma, Riverside Co., Calif.

Mar. 6

See pages 4-5 of Journal for details of transfer and release experiments.

Mayhew 1963

Uma notata

Mar. 16 — 5 mi. W. of Glamis, Imperial Co., Calif.

These animals were not at all abundant on the sand surface while we looked for them from 1400 to 1745. The sky was 100% overcast and the air was quite cool (air temps. from 15.8° to 19.0° C were recorded during this period). Nevertheless, in spite of these adverse weather conditions, 7 immature lizards were seen above the sand surface, one of them as late as 1720. I think its cloacal temperature (20.6°C) is the lowest I have ever recorded for any Uma spp. while it was on top of the sand. Relatively few tracks of Uma were seen on the sand, but a strong wind had blown the day before, eliminating all the old tracks.

Mar. 22 — Mira Loma, Riverside Co., Calif.

At 1045 this morning 7 young lizards were released at dune #3. They were turned loose beside a pair of eucalyptus trees near the road — at the edge of the sandy area. The sand was damp just beneath the surface.

April 5 — 5 mi. W. of Glamis, Imperial Co., Calif.

This afternoon 34 were captured between 1515 and 1735. One of them, of [redacted] mm (S-V), died, but the others were kept for the Mira Loma experiment.

Uma notata

April 8 — Glamis area, Imperial Co., Calif.

A marked ♀ (72 mm, S-V) was captured at 1605 today (#115). It had a cloacal temp. of 31.8°C after being chased about 30 feet. It was measured & released. Some of these animals were seen in somewhat protected locations today during the 15 mph NW wind, but not many were out. #115 was marked 11 July 1961 — S-V then was 68 mm.

April 28 — One young female (51 mm S-V) was measured tonight on the road.

1964

June 10 — UCR campus, Riverside Co., Calif.

The lizards we brought from Glamis last week were sorted into 2 cages in the laboratory today: cage #1 contains ♂ and non-gravid ♀, as follows:

#	sex	#	sex
207	♀	218	♀
208	♀	222	♂
213	♀	224	♂
214	♂	225	♀
215	♀	226	♂
216	♂	230	♂

Cage #5 contains 13 ♀♀ that appear to be gravid. They are #209, 210, 211, 212, 217, 219, 220, 221, 223, 227, 228, 229, and 231. These lizards will be kept in the lab. until the outdoor cages are completed.

June 21 — UCR campus, Riverside Co., Calif.

Al Bennett found 3 eggs near the mouth of a burrow in the lab. cage that contains the gravid females. One of the eggs was already desiccated, but the other two were in fine shape. They measured:

size	weight
23.5 X 11.1 mm.	1.71 gms.
22.3 X 11.1 mm.	1.68 gms.

These eggs were placed in the Vapor-temp. at 90°F.

July 6 — another ♀ laid 1 egg in the laboratory cage. 22.1 X 10.1 mm. 1.74 gms. (The egg spoiled a short time after the measurements were taken.)

July 13 — another ♀ laid 2 eggs today in the laboratory cage. They measured:

21.6 X 11.7 mm.	1.55 gms.
22.0 X 12.4 "	1.52 "

These eggs were placed in the Vapor-Temp.

July 15 — The eggs in the Vapor-Temp. were spoiled today.

1965

April 12 — Glamis area, Imperial Co., Calif.

This afternoon Bob Lasiewski (UCLA), Paul Licht (UCB), his wife, Barbara, Bob's wife, Margaret, & I went to the dunes

April 12 Glamis area, Imperial Co., Calif.

We were interested in comparing data acquired with a Schultheis thermometer with that obtained with a Honeywell "Brown" recorder.

April 13 We set up some wire enclosures in which we kept U. notata we captured yesterday. These animals were attached to copper-constantan thermocouples that were connected to the "Brown" recorder. The temperatures of these animals then could be compared to the temperatures of lizards I would be capturing throughout the day, and whose temperatures I would be measuring with a Schultheis thermometer. These temperatures (in both cases) were recorded to the nearest hour (i.e. 0831 to 0930 = 0900). My field temperatures were as follows:

0900	1000		1100	1200
34.8°C	36.2°C	31.2°C	33.0°C	40.0°C
34.0	33.2	34.2	34.0	41.0
31.2	35.0	32.0	37.0	39.0
$\bar{x}$ = 33.3	38.4	40.0	33.6	38.4
N = 3	35.8	31.0	41.4	36.8
	34.2	39.5	37.4	$\bar{x}$ = 39.0
	36.2	34.8	34.0	N = 5
	34.6	40.4	37.5	
	N = 16 ; $\bar{x}$ = 35.4		$\bar{x}$ = 36.0; N = 8	

April 13

Glamis area, Imperial Co., Calif.

1300	1400	1500	1600	1700
38.0°C	40.6°C	38.6°C	33.8°C	28.8°C
37.0	35.4	34.6	37.0	28.2
37.5	39.5	36.4	36.2	31.0
38.8	36.0	36.6	34.6	31.0
$\bar{X}$=37.8	$\bar{X}$=37.9	38.2	33.6	28.2
N=4	N=4	37.4	33.6	29.2
		35.0	33.7	34.0
		34.5	35.2	30.0
		36.2	36.0	30.0
		33.8	33.8	$\bar{X}$=30.0
		$\bar{X}$=36.1	32.4	N=9
		N=10	32.0	
			31.2	
			$\bar{X}$=34.1	
			N=13	

Thus, $\bar{X}$ for AM = 35.9°C (N=32)
$\bar{X}$ for PM = 34.4°C (N=40)
$\bar{X}$ for entire day = 35.1°C (N=72)

The day was very mild: air temperature (1 meter) at 1400 was 22.0°C. There was no overcast and no wind.

The temperatures obtained in the field agreed nicely with the temperatures of the lizards that were attached to the "Brown" recorder. That is, they did for the few lizards that behaved "naturally" in the enclosures. Many of the enclosed lizards simply remained

April 13 — Glamis area, Imperial Co., Calif.

buried beneath the sand in the shade of the available perennial vegetation that was growing beside the enclosures.

April 14 — This morning we repeated the procedures of yesterday. The field temperatures obtained with a Schultheis thermometer were as follows:

0800	0900	1000	1100
32.2°C	35.0°C	34.8°C	41.0°C
35.6	31.3	34.6	34.0
36.0	30.0	36.5	39.0
$\bar{x}$=34.6	31.4	37.2	40.8
N=3	30.6	29.4	37.1
	33.6	35.4	38.0
	39.0	37.2	35.7
	33.6	32.4	34.0
	31.2	39.3	38.1
	36.2	36.0	38.2
	35.6	39.5	33.8
	31.8	38.0	36.4
	37.0	36.9	35.4
	33.5	38.8	$\bar{x}$=37.0
	$\bar{x}$=33.6	38.3	N=13
	N=14	42.0	
		37.6	
		34.4	
		$\bar{x}$=36.6	
		N=18	

April 14 Glamis area, Imperial Co., Calif.

Thus, $\bar{X}$ for this AM = 35.7°C (N = 48). We did not try to get any more field temperatures in the afternoon. However, we did compare the two methods of obtaining temperatures directly. I noosed lizards in the enclosures that were attached to the "Brown" recorder, and measured their temperatures with a Schultheis thermometer in the usual manner. Paul + Bob were watching the temperature of the same lizard on the recorder at the same time I was measuring its temperature. There was never more than 0.5°C difference between the two measurements, and rarely was there this much variation between the two. Very frequently the readings were identical! (The Schultheis thermometer was inserted so that all of the bulb was within the cloaca, but the last part of the bulb was just inside the cloaca.) From all the measurements we made in the past two days, we have concluded that temperatures measured with a Schultheis thermometer in the field are adequately accurate.

Uma scoparia

Uma scoparia

Mayhew
1958

Uma scoparia

Sept. 18

1 mi. N. of Newberry, San Bernardino Co., Calif.

We started looking over the dunes at 1500, when the air temp. was 36.8°C. & the soil surface temp. was 48°C. Several animals were seen, but they were so wary we were unable to catch any.

Oct. 17

The first lizard seen this morning was an immature, and was spotted at 0755. The only other one we saw also was an immature, and was seen at 0825. The temp. (air) at this time was 24°C. & the soil surface temp. was 31.4°C. No others were seen before we left the area at 1040.

10 mi. E. of Newberry, San Bernardino Co., Calif.

One juvenal was captured at 1141 in the sand deposited between the lava flows from Pisgah Crater. No others were seen — adult or juvenal. The air temp. at this time was 32.2°C., the soil surface temp. was 47.8°C.

1959

Jan. 30

Kelso Dunes, San Bernardino Co., Calif.

One immature was captured and another seen during our short stay at these dunes this afternoon (1200 to 1245).
(1cm) Air temp - 17°C. (waist high) air temp. - 15°C.
soil surface - 27°C.
Relatively few tracks seen yet, indicating little activity so far this year. More tracks seen here than at 1000 Palms area, however.

Mayhew 1959

Feb. 4

3 mi. S. of Rice, San Bernardino Co., Calif.

This afternoon at 1215 a juvenal was captured in the dunes that cross the Rice-Midland road. It was the only one seen. Almost no tracks of other specimens were seen, although the area looked like excellent habitat for U. scoparia.

Ford Dry Lake, 21 mi. W. of Blythe, Riverside Co., Calif.

Frank Awbrey stirred one young animal out of the sand of a dune about one hour before sundown. It was buried about six inches beneath the surface. No others were seen, although tracks were fairly numerous. This looks like the easiest place to get U. scoparia that we have seen so far, since it is only a couple of hundred yards north of U.S. Highway 60-70.

Feb. 5

Dale Dry Lake, San Bernardino Co., Calif.

We reached this area just before sundown this afternoon. Although no animals were found in the extensive dunes east of the lake, numerous tracks were seen. This indicates a fairly large population that is beginning to become active for the spring. The great majority of the tracks have been made by young animals, which is the same situation found with the other 2 species of Uma.

Feb. 20 Dale Dry Lake, San Bernardino Co., Calif.
We began looking in earnest for specimens at station IV at 1130. We caught a young animal at 1200, but released it. By the time we quit looking at 1315, we had captured 7 specimens to keep, one of which was a tremendous male. He tried to hide in the sand beneath a creosote bush, so Frank Awbrey was able to capture it by hand. A rather large number of young were seen, but weren't even chased. Judging by the number of tracks seen in the area, this species of *Uma* is becoming active again after the winter, and this locality has a fairly large population. The rather sparse and scattered vegetation is going to make capture of these animals relatively easy, since there are few burrows for them to hide in (quite different than the Algodones Dunes and *Uma notata*).

Mar. 13 Dale Dry Lake, San Bernardino Co., Calif.
Frank Awbrey, Bob Mayhew & I collected at station IV from 1130 to 1400. During that time we captured 19 of this species, 5 (2 ad. ♂, 3 imm. ♂) of which we released. Of the 14 retained, 7 were adult ♂, 5 were immature ♂, 1 was definitely an adult ♀,

Mayhew 1959

Uma scoparia

Mar. 13 — Dale Dry Lake, San Bernardino Co., Calif.

and 1 was adult, but had a rather well-defined postanal scale on one side but not the other side. We don't know the reason for the predominance of males. The percentage of males captured seems quite high if chance alone were involved. Many large males were seen today — about equal to the total number of immature animals seen. We kicked several out of the sand at the base of creosote bushes early in the day (1030 to 1200). After this, most of them were sitting on the surface of the sand near a bush. They were still in evidence when we stopped at 1400, but we had another job to do, so we had to leave the area. At the time we left (1430), the air temp. (30") was 29.2°C., the soil surface temp. was 38.0°C.

Apr. 24 — 22 mi. E. of 29 Palms, San Bernardino Co., Calif.

We made our monthly collection of this species at station IV at the south edge of Dale Dry Lake. We collected between 1015 and 1150, by which time we had collected a sufficient sample (5 adult ♂, 5 adult ♀, 4 immature ♂). The animals were still active when we left the area at 1225. At this time, the air temp (30") was 32.6°C., at 1cm.

Apr. 24 — 22 mi. E. of 29 Palms, San Bernardino Co., Calif.
it was 37.5°C., and the soil surface temp. was 49.0°C. a fairly strong wind was blowing by the time we quit, but some of the animals were still active nevertheless.

May 22 — 22 mi. E. of 29 Palms, San Bernardino Co., Calif.
Animals were seen from the time we began looking at 0730 until we stopped looking at 1200. We spent most of our time looking on the north side of the 29 Palm–Rice Road, where we have looked before. The area south of the road didn't yield any animals, but it may have been too late in the day when we worked this area.

June 10 — 22 mi. E. of 29 Palms, San Bernardino Co., Calif.
The first adults seen this morning at 0650. at this time, the air temp. (30") was 23.4°C., at 1 cm. it was 25.8°C., soil temp. was 29.8°C., rel. humidity was 40%, no wind. Some animals (relatively few) were still active when we left the area at 1250.

July 21 — Large numbers of animals were active from about 1630 until sundown. We were able to capture 12 during this time, and we saw a number more. There is [redacted] still a fairly large number of small animals in this area, compared with *Uma inornata* and *Uma notata*.

July 22 22 mi. E. of 29 Palms, San Bernardino Co., Calif.
Some of these animals were active very shortly after sunrise. Naturally, most of these early risers were rather small animals, but not all of them were small. We collected about 1/2 mile N.W. of our usual site because we were afraid we might be depleting that population too much. However, there seem to be so many animals in that vicinity that there doesn't appear to be any danger of depleting any population by the sample sizes we have been collecting in this region.

Oct. 24 3 young animals were caught to feed to a young king snake. Collection data are as follows:

S.V. - 58 mm. - ♀ caught 0825 - cl. temp. 33.5°C. - 0' chase; sitting in sun on sand
" - 56 " ♂ " 0845 - " " 36.2°C. - 0' " ; " " " " "
" - 49 " ♀ " 0845 - " " 36.9°C. - 30' " ; " " " " "

at this time, weather conditions were:
air temp. (30") - 24.6°C.
" " (1 cm) - 27.0°C.
soil surf. temp. - 31.0°C.
relative humidity - 41%
no wind

a newly hatched animal was seen at 0745.

Nov. 14 The first animal seen today was adult ♀ size, & was seen at 1125. air temp. (30") - 20.5°C., (1 cm) - 21.6°C., soil surface temp. - 30.0°C.

Mayhew 1960

Uma scoparia

7.7a.

Apr. 11

Dale Dry Lake, San Bernardino Co., Calif.

Wind and overcast skies seemed to keep this animals inactive this afternoon. No young ones were seen, and only 5 adults were observed. They were quite spooky. The only 2 caught were dug out of sand.

May 22

We drove 3 miles east of our usual collecting site to see how abundant the animals were in this area. We found rather large numbers of them on both sides of the road. They seemed to be abundant only in areas where there was considerable undercover between the *Larrea divericata* plants. To the north where extensive patches of sand were present, few animals or their tracks were seen, even though the *Larrea* plants were large and bush. almost no other plants were growing in these spots.

1961

Jan. 16

UCR campus, Riverside Co., Calif.

Five or six adults were above ground when I approached to out-door cages (east end of LSB) at 12:30 today, although today makes the 15-th consecutive day in which the temperature has reached 70° F. or better, this is the first time I have seen these animals active in over a month. Walter saw a few active about a week ago, though.

Aubrey
1960

Uma scoparia

July 15 - Dale Dry Lake, 22 mi E. of 29 Palms, San Bernardino Co., Calif.

7 specimens were collected here today, including one caught 5 minutes after sundown.

July 16, - Dale Dry Lake, 25 mi E. of 29 Palms, San Bernardino Co., Calif.

We were in the field this A.M. by 0630 but no Uma were captured until 0720. Between 0720 and 0830 nine specimens were taken and one juvenile was seen. After 0830, when the temperature was approximately 38°C, no more Uma were seen. On these two days a total of 16 Uma scoparia were taken including 6 ♂♂ & 10 ♀♀, 4 of which were gravid. All were adults.

Mayhew 1961

Uma scoparia

Feb. 4

Dale Dry Lake area, San Bernardino Co., Calif.

Five young lizards were seen and captured today. Their measurements are:

Lizard No.	Sex	S-V length (mm.)	Weight (gms.)
20	♂	40	2.2
21	♂	41	2.0
22	♂	42	2.5
23	♀	47	2.7
24	♀	49	2.8

Apr. 8

Forty-two young animals were captured, weighed, & measured. Ten were kept for growth data. The other 32 were toe-clipped & released at our collecting site at Iron age Mine Road. (Data on animals that were kept are in "marked animals" book)

Toe-clip No.	Sex	Length (mm.)	Weight (gms.)
1	♀	50	3.5
2	♂	56	4.6
3	♂	53	4.7
4	♀	53	3.7
5	♂	53	4.1
6	♀	51	3.7
7	♀	45	2.7
8	♂	58	4.7
9	♂	52	4,0
10	♀	53	4.4
11	♀	45	2.6
12	♀	49	3.3
13	♂	56	4.9
14	♀	54	4.7
15	♂	58	5.2
16	♂	51	4.1

Mayhew
1961

Uma scoparia

Apr. 8

Dale Dry Lake, San Bernardino Co., Calif.

No.	sex	Length (mm.)	Weight (gms.)
17	♀	51	3.9
18	♀	55	4.7
19	♀	55	5.2
20	♂	56	5.9
21	♀	51	3.8
22	♀	47	2.9
23	♂	49	3.1
24	♀	51	3.5
25	♂	54	4.6
26	♂ (½ tail)	62	7.7
27	♀	55	5.1
28	♂	57	5.1
29		51	4.3
30	♂	49	3.8
31	♀	57	5.0
32	♂	48	3.1

Sept. 22

UCR, Riverside Co., Calif.

Today 4 animals were placed in outdoor cage #2. They will be held in this cage through the next breeding season. It is hoped they will reproduce successfully under these semi-natural conditions. They are (2♂, 2♀):

No.	sex
1	♀
24	♂
27	♀
123	♂

Uma scoparia

Sept. 22

UCR, Riverside Co., Calif.

At the same time 15 animals were placed in indoor cage # 4. These animals are not quite adult. They will be exposed to 24 hours of light per day, starting today, to see if they can be brought into breeding condition during the winter. They are (6 ♂, 9 ♀):

No.	Sex
4	♂
16	♂
20	♀
22	♀
23	♂
24	♀
25	♀
26	♀

No.	Sex
28	♂
31	♀
32	♀
33	♂
124	♀
172	♀
192 (+20)	♂

The juvenals, or supposed juvenals, were divided equally into 2 groups, 10 per group. One group was placed in cage # 3 as controls. They will continue to receive 11 hours of light per day, as in the past. The other group was placed in indoor cage # 5, which will receive, beginning today, 24 hours of light per day. Both groups will be weighed & measured weekly to see what effect additional light has

Mayhew 1961

Uma scoparia

Sept. 22

UCR, Riverside Co., Calif.
on the growth rate of these young animals. They are:

cage # 3 (11 hours)

No.	sex
2	♀
5	♂
7	♀
9	♀
10	♀
12	♀
13	♀
15	♀
18	♂
69 (+8)	♀

(2 ♂, 8 ♀)

cage # 5 (24 hours)

No.	sex
3	♀
6	♂
8	♀
11	♀
14 (+5)	♀
17	♀
19	♀
21	♂
29	♀
30	♂

(3 ♂, 7 ♀)

Oct. 30

These animals are doing very poorly in all the indoor cages except the 24 hour incubation cage. Most of them have died in the other cages, or lost a great amount of wight.

Nov. 3

all animals in the reproduction cage were checked for breeding condition today:

No.	Sex	S-V	Breeding colors	Breeding Condition
16	♂	65	none	no E.H.*
20	♀	67	"	no eggs
22	♀	63	"	" "
23	♂	65	"	no E.H.*
24	♀	63	"	no eggs
25	♀	62	"	" "

* E.H. = enlarged hemipenes

Mayhew 1961

Uma scoparia

Nov. 3

UCR, Riverside Co., Calif.

No.	Sex	S-V	Breeding colors	Breeding Condition
26	♀	62	none	no eggs
28	♂	60	"	no E.H.
31	♀	63	"	no eggs
32	♀	61	"	" "
33	♂	64	"	no E.H.
124	♀	59	"	no eggs
172	♀	59	"	" "
192(+20)	♂	64	"	no E.H.

Nov. 20

all animals were checked for breeding condition today:

No.	Sex	Breeding colors	Breeding Condition
16	♂	none	slight E.H.
20	♀	"	no eggs
22	♀	"	" "
23	♂	"	slight E.H.
25	♀ (very thin)	"	no eggs
26	♀	"	" "
31	♀ (very thin)	"	" "
32	♀ (very thin)	"	" "
33	♂	"	slight E.H.
124	♀	"	no eggs
172	♀	"	" "
192(+20)	♂	"	no E.H.

The 3 very thin animals (#25, 31 & 32) were killed to put them out of their misery.

Nov. 27

all animals in the 24-hour reproduction cage were weighed, measured, & checked for reproductive condition today:

Mayhew 1961

Uma scoparia

Nov. 27

UCR, Riverside Co., Calif.

No.	Sex	S-V	Breeding Color	Breeding Condition
16	♂	65	none	slight E.H.
20	♀	69	"	no eggs
22	♀	64	"	no eggs
23	♂	68	"	no E.H.
26	♀	65	"	no eggs
33	♂	64	"	no E.H.
124	♀	59	"	no eggs
172	♀	61	"	no eggs
192(+20)	♂	66	"	no E.H.

Dec. 6.

all lizards were checked for reproductive condition today:

No.	Sex	S-V	Breeding Color	Breeding Condition
16	♂	65	slight	slight E.H.
20	♀	69	~~slight~~	1 med egg - each ovary
22	♀	64	slight	1 med egg - right ovary
23	♂	68	slight	slight E.H.
26	♀	65	slight	no eggs
33	♂	64	slight	slight E.H.
124	♀	59	none	no eggs
172	♀	61	slight	no eggs
192(+20)	♂	67	none	no E.H.

Dec. 11

No.	Sex	Breeding Color	Breeding Condition
16	♂	none	~~slight~~ E.H.
20	♀	slight	1 med egg - right ovary 1 small egg - left ovary
22	♀	none	no ~~eggs~~
23	♂	none	slight E.H.
26	♀	slight	1 small egg - rt. ovary
33	♂	none	very slight E.H.
124	♀	none	no eggs

Uma scoparia

Dec. 11

UCR, Riverside Co., Calif.

No.	Sex	Breeding Color	Breeding Condition
172	♀	none	no eggs
192(+20)	♂	none	no E.H.

Dec. 18

all incubation animals palpated today. Results:

No.	Sex	S-V	Breeding Color	Breeding Condition
16	♂	65	none	slight E.H.
20	♀	69	some	1 large egg-each ovary
22	♀	64	none	no eggs
23	♂	71	none	slight E.H.
26	♀	65	slight	1 med. egg-each ovary
33	♂	66	none	slight E.H.
124	♀	59	none	no eggs
172	♀	63	none	no eggs
192(+20)	♂	67	slight	slight E.H.

Dec. 26

No.	Sex	Breeding Color	Breeding Condition
16	♂	none	very slight E.H.
20	♀	some	1 egg-each oviduct
22	♀	none	no eggs
23	♂	none	slight E.H.
26	♀	~~none~~ some	~~slight E.H.~~ 1 large egg-each ovary
33	♂	none	slight E.H.
124	♀	none	no eggs
172	♀	slight	no eggs
192(+20)	♂	slight	slight E.H.

1962

Jan. 2

No.	Sex	Breeding Color	Breeding Condition
20	♀	slight	1 egg-each oviduct (?)
23	♂	none	slight E.H.
26	♀	some	~~no eggs~~ 1 egg-each oviduct (?)
33	♂	none	slight E.H.

Mayhew 1962

Uma scoparia

Jan. 2

UCR, Riverside Co., Calif.

No.	Sex	Breeding Color	Breeding Condition
124	♀	none	no eggs
172	♀	none	" "
192(+20)	♂	none	very slight E. H.

Jan. 8

No.	Sex	Color	Condition
20	♀	some	1 each oviduct (?)
23	♂	slight	slight E. H.
26	♀	some	1 egg - each oviduct (?)
33	♂	slight	slight E. H.
124	♀	none	no eggs
172	♀	slight	no eggs
192(+20)	♂	slight	very slight E. H.

Feb. 7

No.	Sex	S-V	Color	Condition
20	♀	70	yes	1 egg - each oviduct
23	♂	76	slight	slight E. H.
26	♀	65	slight	1 egg - r. oviduct (?)
33	♂	66	slight	no E. H.
124	♀	61	none	no eggs (blind)
172	♀	64	none	no eggs
192	♂	67	slight	slight E. H.

#124 was autopsied today because it has become blind.

Feb. 19

No.	Sex	S-V	Color	Condition
20	♀	70	some (mystic)	no eggs
23	♂	78	some	slight E. H.
26	♀	65	some	no eggs
33	♂	66	none (mystic)	very slight E. H.
192	♂	67	slight	slight E. H.

#20 and 33 were autopsied because of their condition.

Mayhew
1962

Uma scoparia

June 5

Dale Dry Lake, San Bernardino Co., Calif.

Walt Moberly & I looked for this species from 0720 to 1215 today. Animals were not very abundant, even though most of the time was spent looking in a location we have never used before. Lizards were no more abundant there than in the 2 locations we looked where we have collected previously. The entire region still is extremely dry. No annuals or traces of annuals can be found now. Even the Larrea divaricata looks the worse for wear. Wind had erased nearly all previous tracks so any activity today was readily apparent. Very few tracks of any reptiles were seen, however. I saw only 19 U. scoparia all morning.

One immature ♂ 76 mm (S-V) was measured & released.

1963
Feb. 22

Date Dry Lake, San Bernardino Co., Calif.

Herbert Brown, Herta Caylor, Susan Larish, Saul Frommer & I looked for lizards from 0920 to 1430 today. The temperature was cool & sand was blowing all day. Consequently, I didn't really expect to see any lizards active. However, we were

Uma scoparia

Feb. 22

Dale Dry Lake, San Bernardino Co., Calif.

pleasantly surprised to find a lizard at 1015. Several more were found soon after that. In all, 15 Uma were seen today — 12 of which we captured, measured, recorded temperatures, and released, as follows:

Time	Temp. (°C)	
1015	25.8	
1030	29.2	(1 seen)
1035	30.2	
1040	31.6	
1050	32.5	
1055	34.6	
1110	34.0	
1110	33.0	
1135	28.0	
1140	31.8	
1150	28.6	
1315		(1 seen)
1405	35.0	
1415		(1 seen)

Temperatures today were:

Time —	1015	1155	1400
Air temp (1 m) —	18.0	19.6	20.6
" " (1 cm) —	18.2	22.4	23.8
Soil surface temp. —	32.0	33.0	30.5

Many of the lizards we found were buried, and were detected only by the few tracks near them that had not

Feb. 22 Dale Dry Lake, San Bernardino Co., Calif.

been destroyed by the wind. Most of these were found in the morning. We looked as diligently in the afternoon, but couldn't find as many lizards.

Mar. 6 Mira Loma, Riverside Co., Calif.

See pages 4-5 of Journal for details of transfer and release experiments.

Mar. 20 Dale Dry Lake, San Bernardino Co., Calif.

We looked for these animals from 0900 to 1600. Lizards were seen from 0905 to 1505. The weather conditions were nearly perfect for this time of year (air temp [1 meter] at 1100 – 19.8°C; at 1400 – 22.4°C). No wind or clouds were present. We saw a total of 40 animals, 34 of which we were able to capture. Those seen, but not captured, were seen as follows:

1030 – 1	1055 – 1
1050 – 2	1325 – 2

No other species of reptiles were seen during the day.

Mar. 22 Mira Loma, Riverside Co., Calif.

This morning at 1015 I released 33 lizards at dune #2. The sky was partly overcast and the air temperature was fairly cool. Nevertheless, the animals seemed to get along all right. The sand is damp just beneath the surface. The lizards were released at the power pole in the dune.

Mayhew
1963

Uma scoparia

April 12

Dale Dry Lake, San Bernardino Co., Calif.

I don't know what happened to the lizards seen last month that we didn't catch. In spite of looking from 0700 continuously until 1600, we saw only 24 lizards, 20 of which we caught. The weather was almost ideal for them (maximum air temp. [1 m] was 29.0°C). The only place where several animals were seen & numerous tracks was the sandy area immediately west of the old pump house between Melody Knolls & the Iron Age Mine Road. The pump house is on the south side of the highway, about 1/4 mile from the road.

April 16

Mira Loma area, Riverside Co., Calif.

Several animals were released at a dune I'll call dune #5. This is between dunes 3 & 4 where *U. inornata* & *notata* are released. The terrain is sandy between all of these dunes, so each group should be able to spread to the other areas. I am anxious to see what will happen when these forms become sympatric under nearly natural conditions. All 3 should eventually meet before long.

June 11

Mojave Desert, San Bernardino Co., Calif.

We collected these animals at several sites today to see how the animals compare from different parts of the species' range. Today we caught 10 near Dale Dry Lake 19 near Rice, and 3 near Chubbuck.

June 12

Today we collected 8 more animals in Kelso Dunes and 2 in dunes 2 miles west of Lenwood. We did not see any marked differences in these animals except the ones from Lenwood were slightly paler in color. The sand at that location also was somewhat paler than the others.

1965
July 1

UCR, Riverside Co., Calif.

An adult pair successfully copulated in outdoor cage "B" today while we were observing Dipodomys dorsalis in cage "A".

Urosaurus
graciosa

Urosaurus
graciosa

Mayhew 1957

Urosaurus graciosa

Mar. 30 — Salton Sea area, Imperial Co., Calif.

One was captured near a creek on the east side of the Salton Sea, about 16 miles south of Mecca, Riverside Co., Calif. It was captured in a low perennial.

1958

Sept. 19 — 5 mi. W. of Glamis, Imperial Co., Calif.

At 1825, as we were driving from Glamis to Brawley, we captured an adult on the road. The area on each side of the road was covered with extensive sand dunes.

Oct. 17 — 10 mi. E. of Newberry, San Bernardino Co., Calif.

One adult was captured near the road next to the lava flow from Pisgah Crater. It was seen first running across the ground toward a *Larrea divericata*. It was captured in the creosote bush. The air temp. at the time (1240) was 36°C., the soil surface temp. was 48.5°C.

Oct. 31 — 5 mi. W. of Glamis, Imperial Co., Calif.

Three adult ♂♂ were captured this morning (from 0928 to 1214). These were either on the ground beneath vegetation on the sand dunes or else were on the vegetation itself. The air temp. during this period ranged from 22.6°C. to 24.4°C. and the soil surface temp. ranged from 31°C. to 42.5°C.

Dec. 19 — 5 mi. W. of Glamis, Imperial Co., Calif.
An adult ♂ was captured in dense vegetation on the sand dunes this morning at 1150. The air temp. was 22°C, the soil surface temp. was 38°C. This was the only member of this species seen today.

1959

Mar. 21 — 5 mi. W. of Glamis, Imperial Co., Calif.
These animals are becoming numerous above ground now. These are the first we have seen of this species in this area since last December. We captured 10 animals 7 ad. ♂, 1 ad. ♀, 1 immature ♂, + 1 immature ♀. They were all captured on or under perennial vegetation.

Apr. 24 — 22 mi. E. of 29 Palms, San Bernardino Co., Calif.
This morning at 1100 an adult ♂ was captured on the branch of a creosote bush that was growing in sandy soil at the south edge of Dale Dry Lake.

Apr. 25 — 5 mi. W. of Glamis, Imperial Co., Calif.
This morning, between 0850 and 1318, 4 adult ♂ and 1 adult ♀ were captured. All were captured on branches of creosote bush but one — that one was captured on a branch of *Ephedra* sp.

May 23 — 5 mi. W. of Glamis, Imperial Co., Calif.
These animals were fairly numerous today. They were most often seen

Urosaurus graciosa

Awbrey
1960

July 16 - 25 mi E. of 29 Palms,
San Bernardino Co., Calif.

A ♂ + ♀ were taken from a Dalea spinosa today. When the ♀ came into view the ♂ was seen to extend a dewlap and to bob very rapidly.

2 ♀ adults + 1 ♂ adult were taken today.

July 17, - 5 mi W. of Glamis.

3 juveniles were seen on a dead Ephedra californica. One was captured + taken by Bob Lasjewski

One adult ♂ was seen to be sunning itself on open sand at 0805. When we approached it ran to an Ephedra. Altogether 7 adults were taken ~~[illegible]~~ ~~today~~ including 4 ♂♂ + 3 ♀♀.

May 23 — 5 mi. W. of Glamis, Imperial Co., Calif.
in *Croton californicus*, although some were seen in *Eriogonum desertícola*. The color differences in the animals captured on these two plants was very striking.

Nov. 14 — Dale Dry Lake, San Bernardino Co., Calif.
at 1100 three young of the year were seen in different *Dalea spinosa* in a wash. Each of them was sunning itself on a branch of the tree. At the time, weather conditions were:

air temp (30") - 19.4°C.
" " (1cm) - 20.6°C.
soil surface temp. - 28.0°C.
bark " " - 22-25°C.

a few minutes later a fourth one was seen under similar circumstances. No adults were seen all day.

1961

May 14 — 5 mi. W. of Glamis, Imperial Co., Calif.
Today animals were found on: *Croton calif.*, *Eriogonum desertícola*, *Palafoxia linearia*, *Petalonyx thurberi*, and in *Larrea divericata* 7 miles west of Glamis.

UCR, Riverside Co., Calif.

Aug. 16 — at about 1030 #3 laid an egg on top of the rock in the *Urosaurus* terrarium. at 1045 it laid another one in the same place (we had already removed the first one & placed it in moist sand

Aug. 16

UCR, Riverside Co., Calif.

in a finger-bowl). at 1100 she laid a third egg — this time on top of the sand. She doesn't appear to contain any more eggs. all 3 have been placed in moist soil. Their measurements, in the order in which they were laid are:

14.2 X 7.5 mm.
14.4 X 7.7 "
14.0 X 7.9 "

Each egg contained a well-developed reddish area where the embryo is already developing.

The ♀ was rather restless after laying the 3rd egg. She wandered around the terrarium kicking dirt behind her alternately with all four feet.

Sept. 29

One egg was found on top of the sand in cage #2 this evening. It was shrivelled up, but still contained some moist material inside. Since it was found in a very warm part of the cage, it couldn't have been laid more than a few hours previously. although 2 adult *Phrynosoma m'calli* ♀ are also in this cage, I am quite certain this was a *Urosaurus* egg, judging by its size. This ♀ has been in captivity since 16 April 1961, along with a ♂. She has appeared to be gravid for some time.

Mayhew 1962

Urosaurus graciosa

Aug. 10

Dale Dry Lake, San Bernardino Co., Calif.

an adult was seen in a smoke tree (Dalea spinosa) at 0910.

1963

Mar. 16

5 mi. W. of Glamis, Imperial Co., Calif.

These animals were found on the perennials in the dunes this afternoon (1400 to 1745 was the time spent in the dunes), even though the sky was 100% overcast and the air was quite cool (15.8° to 19.0°C during this period). I had not expected to see any of them today under these environmental conditions, so I was quite surprised when we found the first one. In all, 18 were found and captured. They were very easy to capture by hand today, although they were capable of movement, as some of them demonstrated, a slow approach with the hand was all that was necessary to capture most of them. The cloacal temps. of these animals were considerably lower than any I had measured in March previously. Even though the cold front arrived rather quickly, these animals had not been caught out in the open by the cold & therefore had been unable to escape, since

Mar. 16 5 mi. W. of Glamis, Imperial Co., Calif.
no animals were found after 1705, even though we looked in typical sites for U. graciosa until 1745.

April 20 5 mi. W. of Glamis, Imperial Co., Calif.
a total of 27 lizards were captured by the field zoology class today. One immature was released. Temp. data were acquired for several of them, but others had no collecting data taken. Measurements of the latter group were:

Sex	S-V length (mm)
♀	47
♀	49
♀	51
♂	54
♂	53
♀	49
♂	56
♀	49

Uta mearnsi

Uta mearnsi

Mayhew 1958

Uta mearnsi

Apr. 20 — Palm Desert, Riverside Co., Calif.

Today we captured one adult and saw a few others. The temp. today was quite warm, however, which seemed to reduce the activity of this species compared to that seen on previous trips to this same region. The maximum temp. in Indio today was 109°F., and that in La Quinta was 108°F.; so in Deep Canyon, where we were, it was probably 110°F.+ We had no thermometer along, so I don't know just how hot it was where these animals were seen. There weren't nearly as many animals about as there were when we were here last year.

June 11 — 3 mi. E. of Jacumba, San Diego Co., Calif.

This afternoon we caught one adult and saw two more in a rock-covered slope north of highway 80. It was rather late in the afternoon when we reached this spot, however, so not many reptiles of any kind were seen.

Aug. 5 — Palm Desert, Riverside Co., Calif.

One adult was seen this morning clinging to the cliff walls just inside the entrance to Deep Canyon (time was 0800) about 20 feet above the canyon floor. It was the only one seen while we were in the canyon this trip.

Oct. 24 Deep Canyon, Riverside Co., Calif.

An adult was seen near the entrance to the canyon. It was sitting in the open on the shady side of a rocky cliff. The sun had not reached these rocks yet today (1400). The air temp. was 22.8°C., the rock surface temp. was 23.8°C. Even though we searched both shady and sunny areas, no other members of this species were seen.

1959

Feb. 18 Cat Canyon, San Jacinto Mts., Riverside Co., Calif.

Several of us hiked up this canyon today. Although there is considerable habitat suitable for this species, no animals were seen today, even though the weather was clear and calm. At 1215 a sample temperature was recorded for another species of reptile. At that time, air temp. was 16.6°C., & soil surface temp. was 28.0°C.

April 18 Deep Canyon Des. Res. Station, Riverside Co., Calif.

This afternoon 2 adults were seen but none were captured. They were seen in Deep Canyon itself. The weather was fine, but for some reason no others were seen.

Uta stansburiana

Uta stansburiana

Mayhew 1956

Uta stansburiana

Dec. 22 Univ. of Calif. campus, Riverside Co., Calif.

This morning an adult that I took to be a female (more somber color than the other one with it) was digging in the sand at the side of the lizard pen. First it would dig alternately with the front feet for haly a dozen digs or so, then alternate with each of the hind feet (never front and hind feet together). This continued until a hole about two inches deep had been excavated. The one assumed to be a male came over once or twice to look, but did nothing else near the hole. However, while the female(?) was digging, the male(?) twice approached a smaller Uta, and while circling the smaller animal, would poke it in the ribs with two or three light taps with the nose. This was done on both sides of the smaller animal. The smaller Uta merely raised its tail each time this happened. After two or three repetitions of this, the larger Uta walked away. The female(?) dug two holes about six inches apart, and both about two to three inches deep, then left them both.

1958

July 1 a young Uta 21 mm. long was caught

Mayhew 1958

Uta stansburiana

July 1 — Univ. Calif. campus, Riverside, Riverside Co., Calif.
on Box Springs Mts. this afternoon just above Belvedere Heights. It was brought back to the lab. to see if some growth data could be obtained from it.

Dec. 13 — This morning at 0945 Frank Awbrey arrived at the blind in A area to look for Sceloporus orcutti. However, all he saw was one Uta stansburiana as follows: at 1000 this animal was seen on O rock. It was sitting in full sunlight at a right angle to the sun's rays. At 1025 it moved out of sight. It was not seen again before he left the area at 1200.

At 1245 I reached A area. At 1300 weather conditions were recorded:

air temp. — 28.4°C.
(sun) soil surface temp. — 44°C.
rock surface temp. (sun) - 38°C.
" " " (shade) - 28°C.

At 1332 an adult Uta stansburiana ran across a large boulder about 8' away from my feet. It ran to two rocks that lie on top of the large boulder & are stacked one on the other. The lizard sat in the shade between these two rocks. At 1342 the lizard disappeared on the other side of the two rocks.

Dec. 13 — UCR campus, Riverside Co., Calif.

at 1345 the lizard appeared again & sat in full sunlight on the large boulder. at 1350 it moved into the shade of the two rocks. At 1351 it hopped upon the lower of the two rocks & disappeared in the crack between the two. At 1410 when I set a thermometer out for soil surface temp. I saw the lizard resting in the shade between the two rocks on the side opposite to where I had been sitting. At this time, air temp. was 28.9°C., soil surface temp. was 44°C. At 1505 the lizard moved out into direct sunlight. At 1506 I was forced to sneeze, and this frightened the lizard into running over the surface of the large boulder and disappearing over the side. I walked around the large boulder, but the lizard had disappeared somewhere beneath it. The lizard was not seen any more during my stay.

1959

Jan. 25 — 5 mi. N.W. of 10 Palms, Riverside Co., Calif.

Several were seen on a dry hillside in the Indio Hills this afternoon. A few of them were captured. Three of the four animals captured turned out to be ♂, even though we thought they were

Mayhew 1959

Jan. 25 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.
all ♀, judging by the postanal scales. Even though we thought these animals might be immatures because of their size, each of them possessed well developed testes.

Jan. 28 Granite Mts., 20 mi. S. Kelso, San Bernardino Co., Calif.
This afternoon between 1435 and 1525 six adults were seen, but none could be captured. They stayed in very dense brush. At this time the air temp. was 11.8°C. (waist high), air temp. 1 cm. above the ground was 13.8°C., and the surface temp. was 14.5°C. We were in a large amphitheater-like area on the north-east side of the mountains.

Jan. 29 22 mi. N.W. of Kelso, San Bernardino Co, Calif.
This afternoon from 1215 to 1430 we saw over a dozen animals. Most of them were sunning themselves on large lava boulders at the end of a lava flow that reached Kelbaker Road. Several of these were caught for specimens of reproductive condition. Weather conditions:

air temp. (waist high) — 13.5°C.
" " (1 cm) — 14.6°C.
rock " — 24.5°C.
wind — none

(This area is also 15 mi. S.E. from Baker.)
Frank Aubrey collected three of them with a slingshot, so these had to be

Jan. 29 22 mi. N.W. of Kelso, San Bernardino Co., Calif.
preserved on the spot. The testes in the males that were preserved looked as though these animals were about ready to breed. The epididymis was well-developed as well.

Feb. 2 Deep Canyon, Palm Desert, Riverside Co., Calif.
This afternoon at 1230 an adult ♀ was captured after it was seen running across the dirt road in front of us. It was captured about 30 feet north of the gate that marks the boundary to the future UCR desert research area.

Feb. 4 6 mi. S.E. of Midland, Riverside Co., Calif.
Four adults were seen in a day walk this afternoon while Frank Awbrey & I were collecting wild flowers. None of them were captured.

Feb. 10 UCR campus, Riverside Co., Calif.
When Frank Awbrey opened specimens collected 22 mi. N.W. of Kelso, San Bernardino Co., Calif. on Jan. 29, 1959, he found the ♀ (No. 38) contained two yellow ova 3.5 mm. in diameter in each ovary. There were also 3 small ova in the left ovary, and 4 additional small ova in the right ovary. The male (No. 40) collected at the same spot the same day had large and highly convoluted vasa deferentia. The testes were both 5 mm. in diameter, and there was a milky-colored

Uta stansburiana

Feb. 10 — UCR campus, Riverside Co., Calif.

secretion, apparently seminal fluid, from the seminal ducts at the bases of the hemipenes. No microscopic check was made of this fluid, since no compound microscope was readily available at the time.

Feb. 18 — Cat Canyon, San Jacinto Mts., Riverside Co., Calif.

At 1215 today 3 animals were seen on an open slope, but they all escaped into thick brush. At the time, the air temp. was 16.6°C., & the soil surface temp. was 28.0°C.

Mar. 3 — 2 mi. S. of UCR campus, Riverside Co., Calif.

This afternoon we caught one adult and saw several others. They seem to be becoming very active now. The temperatures this afternoon were:

air temp.(30") — 27.5 °C.
" " (1 cm) — 28.4°C.
soil surface temp. — 42.5°C.
rock " " — 42°C.

April 19 — Deep Canyon Des. Res. Station, Riverside Co., Calif.

This morning several animals were seen, but none could be captured. The earliest one seen was spotted at 0830 when the air temp.(30") was 19.8°C.

Apr. 24 — 2 mi. N.E. of Yucca Valley, San Bernardino Co., Calif.

One adult ♀ was caught near some Joshua trees on the Old Woman Spring Road at about 4000 feet elevation. Others

Apr. 24 — 2 mi. N.E. of Yucca Valley, San Bernardino Co., Calif.
were seen but not captured.

Apr. 30 — 5 mi. N.W. of 1000 Palms, Riverside Co., Calif.
This morning at 0940 2 animals (presumed to be a pair) were uncovered. They were under an old board. The ♂ was captured, but the other animal escaped. The wind was blowing 25-30 mph. at the time.

May 9 — 1 mi. E. of Hesperia, San Bernardino Co., Calif.
An adult ♀ was killed this afternoon and autopsied on the spot. She contained 2 eggs in the oviducts (1 on each side), but they didn't seem to possess any shell as yet. There were 3-5 ova in each ovary, all of which were 1 mm. or less in diameter. The snout-vent length of the animal was 46 mm. The oviducts had been damaged when the animal was collected, so we didn't try to save any organs.

May 16 — Stoddard Valley, San Bernardino Co., Calif.
Several animals were captured this morning among the bushes at the edge of a rocky slope. On the way to Lucerne Valley we saw several others sitting on rocks beside the road. Most of these were seen between the Ord Mts. and Lucerne Valley, but we were watching for them more carefully here.

July 29 — Phelan area, San Bernardino Co., Calif.

Three newly hatched animals were seen in this region today. They were seen at different times and in different localities, so they couldn't have been from the same brood.

Sept. 6 — South Fork campground, Barton Flats, San Berdoo Co., Calif.

at 1515 an immature ♀ was captured and released. It was too small for a cloacal temperature to be taken.

1961

Jan. 17 — UCR campus, Riverside Co., Calif.

Several were seen actively running about today. Eugene Roller & I checked his lizard traps, then looked for lizards. One adult Uta was in one of his traps, and we were able to noose 3 more. Several others were seen while we were out (1315 to 1430). The air temperature (30") ranged from 28.2° to 28.6°C. during this time. The air temp. has been above 70°F. for the past 16 days.

Feb. 4 — Dale Dry Lake area, San Bernardino Co., Calif.

Four adults were seen in rocky hillside terrain between 1500 and 1600. We were unable to capture any of them. They were all quite dark in color.

Feb. 15 — UCR campus, Riverside Co., Calif.

Gene Roller just brought me 6 dessicated eggs from his captive animals. One egg shows a blastodisc. Measurements (in dessicated condition): 11 X 6 mm.

10 x 5 mm.	11 X 5 " (blastodisc)
9 x 6 "	10 X 6 "

Oct. 3 — UCR, Riverside Co., Calif.

Bill Truesdell caught 2 juvenals in his traps on the south side of the campus. One he had captured previously (#10). It measured 27 mm. The other one he toe-clipped #17 + released it. Its S-V measurement was 35 mm.

Nov. 2 — Val Verde, Riverside Co., Calif.

Between 1330 and 1515 today I saw approximately 9 animals. Most of them were sunning themselves. No juvenals were seen, but both adults and immatures were observed. Air temp (1 meter) ranged from 19.0° to 17.2°C. during this period.

1962

Feb 4. — Idyllwild, Riverside Co., Calif.

Today I saw 4 animals sunning themselves on rocks or logs at Camp Emerson. Although fairly large patches of snow are still on the ground, the weather was quite warm today (about 20+°C.). Three of the animals were young, but one was about the largest I have ever seen.

June 18 — Deep Creek Campground, San Bernardino Co., Calif.

Animals collected at this location yesterday were dissected today. Although every one dissected had semen at the terminal end of the vas deferens, only a couple of those examined under the microscope contained very many motile

June 18

Deep Creek Campground, San Bernardino Co., Calif.

sperm at the terminal end. All of them, however, possessed numerous sperm at that location, but they just were not observed wiggling about in any numbers. It appears this may be the very end of the breeding season for this species at Deep Creek, since many of these animals possessed epididymis with almost no sign of semen remaining. I got the impression the semen in many of the vas deferens was just the remainder at the end of the breeding season. All but one of the ♀♀ captured contained eggs in the oviducts. UCR, Riverside Co., Calif.

OcT. 31

Ken Evans captured several lizards in 5 gallon traps on the back of the campus this week. The measurements are:

Sex	S-V length (mm)
♂	53
♂	37
♂	43
♂	37
♂	39
♀	44
♀	36
♀	40
♀	49

Nov. 6 — UCR, Riverside Co., Calif.

Ken Evans captured some more lizards in traps on campus yesterday. Their measurements are:

Sex	S-V length (mm)
♀	34
♂	26
♀	36
♂	39
♀	36
♀	38

Nov. 12 — Ken Evans caught 3 more lizards today:

Sex	S-V length (mm)
♂	35
♂	37
♂	38

Nov. 26 — Ken Evans caught 4 more lizards today:

Sex	S-V length (mm)
♂	29
♂	31
♂	38
♂	42

Dec. 7 — Ken Evans caught 7 more lizards today:

♀	40
♀	31
♂	45
♂	42
♀	41
♂	41
♂	48

Dec. 26

UCR, Riverside Co., Calif.

Ken Evans removed the following lizards from the traps on the hill today:

Sex	S-V length (mm)	
♂	50	(toe-clipped #81)
♂	48	
♂	40	
♀	36	
♂	41	
♀	36	
♂	36	
♀	30	

1963

Jan. 7

Ken Evans brought in 2 more lizards this morning. Their measurements are:

♂ 51 mm (toe-clipped 61, 2, 3)

♂ 38 "

Jan. 16

I removed 3 lizards from a trap this afternoon. One of these animals I had just chased into the trap. I kept the adult and gave the immatures to Ken Evans. Their measurements were:

♀ 32 mm.

♀ 38 mm.

♂ 50 mm (toe-clip #17)

The ♂ was in the sun on open ground.

Jan. 23

Val Verde, Riverside Co., Calif

This afternoon, between 1330 & 1430, I saw 2 adults (1 at 1345, 1 at 1400). Both were sitting on a rock in the sun. The

Jan. 23 Val Verde, Riverside Co., Calif.

air temp. (1 meter) at the time was 21.5°C. (no clouds or wind.) I was unable to capture either of them, as they disappeared beneath the rocks long before I was within range.

Feb. 5 UCR, Riverside Co., Calif.

Ken Evans brought in the following animals this morning:

♂	45 mm (S-V)	♀	44 mm (S-V)
♂	44 "	♀	46 "
♂	43 "	♀	43 "
♂	44 "		

Feb. 25 Ken Evans let me measure the following newly captured lizards today:

♀	39 mm (S-V)	♀	47 mm (S-V)
♂	45 "	♂	41 "
♂	50 "		

Mar. 4 Ken Evans caught 3 more lizards today: ♂ - 51 mm (S-V); ♀ - 39 mm (S-V); ♂ - 43 mm (S-V)

Mar. 15 Ken Evans caught 4 more lizards: ♂ 42 mm; ♀ 38 mm; ♀ 45 mm; ♂ 46 mm (breeding color).

Mar. 22 Ken Evans caught 4 more lizards today: ♀ 43 mm; ♂ 50 mm; ♂ 48 mm; ♂ 50 mm.

John Minnich caught another one a bit later: ♀ 49 mm.

Mar. 26 Lee Foster caught an animal Sat. (Mar. 23): ♂ 46 mm.

Mar. 28 Chuck Elliot caught a lizard today: ♀ 44 mm.

April 9 — Scissors Crossing, San Diego Co., Calif.

Several lizards were seen about noon today while the wind was blowing about 15 mph. & the air temp. (1m) was 15.2°C. Most of them were hugging rocks in the sunshine.

May 26 — 12 mi. W. of Glamis, Imperial Co., Calif.

a ♀ 33 mm (S-V) was found on the road tonight. The habitat is creosote bush scrub. It was DOR.

June 8 — I caught 2 newly-hatched animals (both measured 24 mm S-V) and saw 2 others. They may have been from the same clutch.

July 24 — UCR, Riverside Co., Calif.

a young lizard, 25 mm (S-V) was caught in an ant trap today.

Aug. 23 — Valerie Ernst caught a juvenile 21 mm (S-V) at 1650.

1967

Nov. 24 — UCR, Riverside Co., Calif.

Bruce, John McCarver & I looked for lizards on the south side of the campus from 1300 to 1530. The weather was clear, calm and relatively warm. Lizards were seen from 1310 to 1525.

Nov. 27 — Some of the testes of the animals caught 24 November contained melanophores on or in the tunica albuginea.

Xantusia vigilis

Xantusia vigilis

Xantusia vigilis

Mayhew
1957

Mar. 30 — Pinyon Flats, Riverside Co., Calif.

This afternoon the Zoology 146 class captured several specimens in the dead yucca and agave stalks in this area. The animals were brought back to campus alive.

1958

July 16 — UCR campus, Riverside Co., Calif.

Most of the specimens mentioned above are still alive in an aquarium in the head house. They feed primarily on Drosophila, but will eat mealworms on occasion. They seem to require a ready source of drinking water, however.

Sept. 18 — Hesperia, San Bernardino Co., Calif.

This morning we caught several specimens and saw many more while we were turning over dead Yucca stumps and logs while looking for Sceloporus magister.

1959

Feb. 15 — Pinyon Flats, Riverside Co., Calif.

Steve Anderson brought in 3 adults and 1 young animal that he caught at this location among old Yucca logs.

Mar. 10 — 1 mi. W. of Phelan, San Bernardino Co., Calif.

Today Frank Awbrey & I captured 20 animals (both young and adult)

Mayhew
1959

Xantusia vigilis

Mar. 10

1 mi. W. of Phelan, San Bernardino Co., Calif. in a Joshua tree forest at an elevation of 4300 feet. They were very numerous at this location, and very active when uncovered. Except for 1 Sceloporus occidentalis, they were the only lizards seen today, and the only active ones seen.